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ORIGINAL DEPARTMENT.

LECTURE.

ENDOCARDITIS.

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The next topic that lies in our way is endocarditis, and I, perhaps, had better not enter upon that to-day, as the hour has nearly expired, but make a few preliminary remarks upon what is essential to an understanding of endocarditis and valvular diseases of the heart.

Here you observe a heart, a very large one, laid open. You observe the inner surface of this cavity is lined by a smooth, shining membrane. This is called the endocardium. A serous membrane somewhat analogous to that that lies upon its outside. It lines it completely; lines all these muscles, protecting the muscular structure entirely from contact with the blood. This same lining membrane is to be found in every cavity of the heart, and it is continuous in a certain way, from one to the other.

Now observe how a valve is made. Here is the semilunar valve of the aorta. If you will examine this you will see that the tissue is absolutely continuous from the wall of the ventricle on to this valve. Follow it on a little further; it comes over here and doubles down where my finger is; it doubles down upon this valve, and then from there is reflected off on to the base of the aorta. Well, a valve of the heart is made, then, of a duplication of the lining membrane, of a duplication of the endocardium. You see I have illustrated it with this towel. The valve is open when it lies against the aorta, and you can then hardly see how it is constructed; but open it and you see it is the same lining membrane of the ventricle which doubles down to the bottom of this valve and then passes off, without being broken, into the great vessel, exactly as I have folded this towel.

The mitral valve is made in the same way, but there is a variation. The lining membrane of the ventricle goes down upon the posterior face of the mitral valve, as I hold this now; doubles upon itself, and goes back into the auricle, so that that again is continuous. But the peculiarity is that to this valve are attached a considerable number of little cords that go down into the ventricle and are there attached to what are called the fleshy columns—these bodies. The endocardium is no less continuous for that reason. Indeed, it doubles upon these cords, it covers them. Each valve, in each part of the heart, is made in the same way, but there is, however, a little more to each of these valves. There is a fibrous structure in the middle of them—you may say a skeleton; something like the frame of a house before there are any boards or plaster put upon it. Then the fibrous tissue of the valve lies between these two folds of membrane, as my finger lies between the two folds of this towel. Now, it happens that in endocarditis that particular part, that is, the aortic or the pulmonary valve, is most likely to show the results of inflammatory action.

But the point I wanted to bring to your attention was, and is, in what way the blood circulates through the heart, and what the heart does in the course of the circulation of the blood through it.

Suppose the blood is coming in from the lung.

In the period of rest the left auricle is being distended by the blood coming in from the lung. The contraction of the heart begins in the auricle and almost instantly spreads to the ventricle. The result of this little contraction of the auricle before the ventricle begins to contract is to send a little more blood into the ventricle, or perhaps to send a portion of it backward, because there is no valve which will prevent its going either way. Then the left ventricle contracts; what becomes of the blood? It goes right up here into this great aorta, and if there is anything here on this valve to obstruct it it may make a noise, and that is not normal; that is a bruit or murmur. Then, when you have a murmur produced at the base of the heart when the ventricle contracts it is produced by an obstruction—it may be a narrowing of the vessel at the point of these valves. Now, what else, when this ventricle contracts? If there is a way for it to get out anywhere the blood will take that way, as well as this, its natural way. Suppose this valve, the mitral, is insufficient; suppose it to be diseased in such a way it cannot close perfectly; what is there to prevent the blood, when the ventricle contracts, going back on the very track it came? Nothing in the world. Well, then, when this mitral valve is insufficient, and you get a murmur from it, it will be when the ventricle contracts: that is regurgitation. When in systole, or contraction of the ventricle, there is a murmur here at the aortic opening, that is obstruction, while this is regurgitation.

Now, then, suppose this aortic valve to be so far diseased, so far narrowed and shortened, that the three different portions of the valve cannot meet in the middle of the artery, and stop the blood going back; there would be a murmur then. And when? Why, after the first sound of the heart has gone by, after the contraction of the ventricle has gone—in the period of rest, or in the place of the second sound. A murmur, then, heard at the base of the heart in the place of the second sound, implies regurgitation; a murmur heard during the contraction of the heart implies obstruction. You may have both in the same person, at the same time. Here, again, at the mitral valve, if there is a vegetation, if there is unnatural thickening of the valves, when the blood comes from the auricle into the ventricle during the period of repose, there may be a murmur. It is almost always a very faint murmur, and Dr. Williams described it, a good many years ago, as being like the sound produced by breathing the word *awe*—a very soft blowing murmur. That is in the period of rest; it has been called presystolic. I have no objection to the name; it is before the systole. Then you may have two murmurs at each one of these valvular openings; in which case it is obstruction in the one instance and regurgitation in the other. Now, to satisfy you whether it is obstructive or regurgitative you have only to remember the course of the blood. It begins here in the auricle, passes into the ventricle during the period of rest; then the ventricle contracts and it goes over these valves into the aorta, or, if there is an opening, it goes right back.

SECOND LECTURE.

Here is a large heart—all the better, because it acts just as a small one does, and can be seen at a greater distance. Here is the mitral valve, which is to guard the communication between the left auricle and the left ventricle, and you observe that it is attached at its border to some fleshy columns here, three tendinous cords—three small tendinous cords that run from the border of the valves to the fleshy columns. I will repeat what I said last. The blood we will suppose is here in the left auricle. It has come from the lungs. The first act of contraction is in the auricle, but it is almost immediately followed by contraction of the ventricle. If the heart is in its normal condition, when the left ventricle contracts it will throw the blood past the semilunar valves up into the aorta. If there is a hole here, if the mitral valve does not close properly, we call it insufficiency, and a portion of the blood will go back on the very track it has come; go back into the auricle. That we call mitral regurgitation. Then, too, it sometimes happens, as I shall explain to you further on, that these valves are subjected to a certain amount of inflammatory action when endocarditis occurs, and their action is disordered. The mitral valve, we know, is composed of fleshy columns which are composed of fibres that are continuous with those in the walls of the heart. Now, if these be diseased, one or more of them, or a part of them may become contracted and leave an opening in the mitral valve. This fact shows that regurgitation may take place without disease of the valves; that is, without deforming disease of the valves.

As the blood comes from the ventricles it is forced over the semilunar valves, which lie smoothly up against the aorta, presenting no obstruction to the outgo of the blood. If they are rough, thickened, contracted, then they will present an obstacle to the course of the blood, and there will be produced a murmur during the contraction of the heart, that is, during systole—

the time when you feel the impulse of the heart against the ear when it is applied to the chest. Now, that is easily remembered, I think; the murmur in systole, the murmur in the contraction of the ventricle, heard over that part of the chest which corresponds to the aorta, an aortic obstruction. When the blood reaches the aorta the aorta dilates, and on account of the many little elastic fibres which it contains it has a disposition at once to contract; and in contracting it of course starts the current backward toward the heart, which instantly closes these valves and they prevent its return. But if these valves have become so thickened, so hard and inelastic that they will not close, a portion of the blood is sent back into the ventricle, which has to do its work over. This produces a murmur which occurs during the period of repose or in the place of the second sound. This constitutes aortic regurgitation. We often have obstruction and regurgitation in the same person, so that we will have a "whewing" sound during contraction, which is repeated during diastole of the ventricle. It has come to be the fashion latterly to use the terms "direct" and "indirect." I do not think the terms are nearly as good as obstruction and regurgitation, for these are descriptive, while only "direct" can be regarded as descriptive in the other choice of terms.

Then the blood goes on in the general circulation and comes back in the veins to the other side of the heart, to the right auricle. The right auricle in turn contracts after it is full and sends its blood into the right ventricle, which, being connected with the left ventricle by their septum, is really a part of the same organ and liable to contract at the same time; and the right and left ventricles then do contract at the same instant, and a sound produced by the passage of blood into the pulmonary artery occurs in diastole. You observe that the pulmonary artery has valves corresponding with those of the aorta, and they work in the same way. In this particular specimen they are in a healthy condition, and you can observe how delicate they are. You cannot recognize them by touch. They fall up against the artery and allow the blood to flow over them easily and freely. But these, too, are sometimes found to be diseased. The valves of the right side of the heart, I say, are sometimes found to be diseased, and here is as good a place to state the fact as any, that in persons who have disease of the right side, if it is not due to laceration or breaking of its tendinous cords, you may pretty reasonably infer that the disease belonged to the period before birth. The right side of the heart is more subject than the left to disease in utero. The left side of the heart becomes diseased after birth. If you can find a murmur, then, that belongs to the pulmonary valves, you will be pretty sure to find it in a child, and it will be pretty safe to infer that there was endocarditis in that child before it was born. It is not a common occurrence, and yet it has happened a few times in my own observation. Then the same law applies to the current of blood and to the sound that will be produced by disease of the valves of the right side as on the left. There are two valves here, the tricuspid, which guard the opening between the auricle and ventricle, and act in the same way as the mitral valve on the left side and the pulmonary valve.

Now, I will repeat the formula by which you can recognize disease at different points of the heart. Notice that these fleshy columns are connected with the heart at a distance of from one inch to an inch and a half above its apex; in this heart it is fully an inch and a half. These tendinous cords run into the heart, and may be regarded as a conducting medium, and the fleshy columns also may be regarded as a conducting medium. The point where, physiologically, or in audition, you can get nearest to the heart, is not at the apex exactly, but about an inch above. There you will be more likely to hear sounds produced in the mitral valve than at any other part of the chest; and when I say "heard at the apex," I mean at the apex, or an inch above. When, then, you have a murmur during the time the ventricle is being filled, you ascertain, by listening at different points, where it is most distinct. If it is most distinct at or near the apex in systole it is a murmur of regurgitation by the mitral valve; if, on the contrary, it is heard in the period of repose, in diastole, during this period of repose the blood is flowing from the auricle into the ventricle, and that will be an obstructive sound in the mitral. The mitral is roughened, and throws the blood or itself into sonorous vibrations, as the blood flows over it; that, however, is almost always a very feeble sound. As I said before, Dr. Williams described it by breathing the word "awe," opening the throat well and breathing a little loud.

A murmur heard most distinctly on the third rib, at the sternum, and heard in systole, must be obstruction at the aortic valve. Then, if it is repeated immediately afterward, in the interval—you can hardly appreciate it, and yet you do appreciate it, that there are two sounds—the latter is regurgitation; the valve acts insufficiently, it cannot perform its office, and gives the mur-

murs. Every little while you get two murmurs. I have heard four in the same person, two produced at the aortic valve, two at the mitral.

Now, the same law applies to the right side of the heart. You listen to the right side of the heart, at the lower part of the precordial region on the right side. I do not say the lower part of the sternum, because the sternum extends below the heart region; but on the sternum at the fifth rib, and outside the sternum a little, on the same level, you will get a sound from the right heart more distinctly than anywhere else. If, then, you get a murmur in that region, heard most distinctly in contraction of the heart, in systole, that would be regurgitation by the tricuspid valve. If, on the contrary, you get a murmur which you are not quite satisfied is aortic, and it is a little to the left on the sternum, you may, perhaps, conjecture that it belongs to the pulmonary artery. The pulmonary artery is given off a little further to the left than the aorta, that is, this way; and you listen for the aortic murmurs on the middle of the sternum and a little to the right; for the pulmonary murmurs on the left edge of the sternum and a little to the left of the sternum. If you get a murmur there in systole it is obstruction at the pulmonary valve. If it is repeated, it is then regurgitation at the same valve, and is heard most distinctly at the base of the heart. But if it is tricuspid you will hear it most distinctly on the right part of the heart, at the right edge of the sternum; I never have heard a direct or obstructive murmur at this point. Indeed, a good many years ago Dr. King thought he demonstrated, and probably he did, that this particular part of the heart, the opening of the tricuspid valve, has considerable power of dilatation without injury, and when the veins are over-crowded with blood, surcharging the left ventricle, he says the right ventricle has the power of sending it back into the veins again through the tricuspid opening and without a murmur. I can easily comprehend that it may be so. It is what he called the safety-valve arrangement. The right ventricle being over distended the right auriculo-ventricular opening would be dilated also, and a part of the blood can be thrown back into the veins of the general system without being compelled to go forward into the arteries that lead to the lungs.

Now, then, with reference to the tones of these murmurs. You hear them in different stages of cardiac disease; mildly when the valves begin to be deteriorated; more strongly when the deformity has become considerable. And then again, perhaps not at all after the disease has continued for a length of time and the heart has become weakened by it. Almost every person who has cardiac disease which finally terminates fatally reaches a period, before death, when the murmur cannot be heard, and the simple reason is that the heart cannot contract upon its contents with sufficient force to make the blood run swiftly enough to cause a murmur. It is probable these murmurs are made in the solid tissue and not in the blood itself. The vibrations that produce the murmur are probably in these deformed valves. You have a great many terms by which to designate these murmurs, according to their tone. The French have used terms which represent a filing sound, a rasping sound, a sawing sound, which, of course, are harsh, and given to distinguish the harsh sounds from those which are soft and blowing. But it is not necessary for you to learn those terms. The coarse sounds are almost always produced by deformity or defects of the valves. The blowing sounds are often produced by the same thing, but they are also produced under circumstances in which the valves are not diseased; when, for example, the blood becomes watery and thin, by a law which I cannot explain to you, the blood makes a noise in going over the aortic valves. It is the anæmic sound; and, therefore, if you hear a blowing sound at the aortic opening, as if it were obstructive, your next business is to look in the patient's face and see if she is anæmic—for it occurs more frequently in women than in men. If the face is pale and watery, has a chlorotic look, you will be very likely to get a soft murmur—a blowing murmur at the aortic opening—and it will not authorize you to infer that there is any disease of the aortic valves under such circumstances. There is another thing connected with the thin blood which may perhaps help you to distinguish the sounds that are produced by deformity of the valves and those that occur when the valves are sound. In most of these persons in whom anæmic murmurs occur there will be heard, through the stethoscope applied over the jugular vein in the neck, a continuous humming noise. They call it *bruit de la toupie*, which a friend of mine has interpreted with a little liberty "devil of a noise." This *bruit de la toupie* is not the work of the devil. The French have a little toy which children whirl around, and as it goes around a spring works on a wheel of cogs and makes a repetition of clicks. That is the devil that this is compared with—*bruit de la toupie*. That, of course, is not connected with disease of the heart, but as it so frequently occurs in anæmic persons it is

worth while to associate it in this connection. The harsh, rasping sound is almost always produced by some defect of the valves; the soft, blowing murmur may be so produced, but it is occasionally found in persons whose hearts are sound enough but whose blood is diseased or in a watery condition. I do not think there is any practical use, therefore, in making any other distinctions between the murmur that is soft and the harsh or blowing and rough.

Now, there is another thing that I must call your attention to before entering upon endocarditis itself, associated with the things that I have been explaining. The heart itself has two sounds. They are denominated first and second, and it will interest you to know what is the cause of these two sounds; and, perhaps, as great diversity of opinion has been expressed in regard to the cause of them, it may be of some little interest to you to know which of them I have chosen, as I have been pretty familiar with heart disease. In a few days I shall have a microscopic specimen of the muscles of the heart to show you. It is not ready yet. In that I can show you the different layers of muscular tissue in the heart; show you how some run at nearly right angles to others—indeed, quite at right angles sometimes. I cannot show you how they are braided together, for before the specimen could get around the class it would be lost; but you can infer it from a part of the material of which the house is built. I can show you repeated instances in which some muscular fibres go in one direction, and other fibres at right angles to them. The consequence of this arrangement of fibres is, that as the heart contracts all these bundles of fibres contract at the same time, and one rubs against another. It is not exactly a fiddle-string operation, and yet it is not without analogy to it. These fibres cannot rub upon one another actively, as they do when the heart contracts, without producing some sound, and this first sound continues during the contraction of the heart. It begins with the beginning and ends with the end of that contraction, that is, of the ventricles. The auricles are placed a little out of your reach, so that you cannot know what is going on in them by audition. You can imitate that sound very closely by placing the stethoscope upon the ball of the thumb and opening the thumb in this manner. You will get in your ear a sound exactly like that that you get in the first sound of the heart. Another very good illustration of it is, to place the arm against something that is firm and extend and contract it, and let your chum listen to the action of the muscles. It has been said that the first sound is produced by the tension of the mitral valves in consequence of the sudden jerk made upon them by their muscular columns. I do not know that that does not enter into the first sound and make a part of it; I do not know that it does. It has been said, again, that the first sound is produced by the rush of blood from the auricle into the ventricle(?). I do not know but that aids in the production of the first sound, and I do not know that it does. The current is easy, the flow is at a pretty good rate, to be sure, and I should not be surprised if its concussion against the empty walls of the ventricles would produce some effect of that kind; and yet I do not know it.

I think when you have tried these little experiments I have spoken to you of, and then listen to the heart sound, you will be pretty well satisfied that the chief element in it is the contraction of the muscles, and the rubbing of these cross fibres one against another. They are separated, to be sure, by a little layer of connective tissue, but even that is put upon the stretch by the action of these muscles that are working at right angular contraction. The first sound, therefore, is confined entirely to the systole, to the contraction. The second sound there are no debates about; experiments have been performed that explain that perfectly. A number of physicians in London tortured some honest old asses and worn-out horses, by opening into the chest and having little hooks that were sharp enough to penetrate the tissue, laying the hook handle along the course of the aorta and penetrating it, then carrying the hook forward and getting it over one of the folds of the semilunar valve and drawing it back up to the wall of the artery. It is an experiment that can be pretty easily done. The result of the experiment was a cessation of the second sound. Then by depressing the handle and raising the point of this hook the valve would be let loose, and be at liberty to play again, and then the second sound was reproduced. They repeated the experiment a great many times, and in a great variety of ways. A Philadelphia committee of doctors repeated it with the same result, so that we have the fact pretty well ascertained, that the second sound, which you will recognize as instantaneous as a click, results from the falling together of these three segments of the valve in the centre of the aorta—a noise of exactly the same kind that I produce now by striking my fingers together. Then you would naturally expect, if these aortic valves are incompetent, are inefficient, do not guard the opening, that there would be no second sound. But call to

mind the fact that I just now said to you that the two hearts beat at the same time, and it is almost never found to be a fact that the pulmonary valves and the aortic valves are diseased in the same person. You have, then, the pulmonary valves to give you the second sound. The aortic valves may not participate in it, may not fall together at all; they may be too short and too inflexible. The cause, then, of the two sounds of the heart you can easily carry in mind. The reflux of the blood from the aorta in its attempt to get back into the ventricle closes, as I told you, these valves, and they close with a click, and that is all there is of the second sound.

Now, we are ready to pursue our course on endocarditis. I have gone into this explanation of the action of the valves, and the effects of their not working properly, because endocarditis is a deformer of valves.

When inflammation occurs in the endocardium, we are not sure that it affects the whole extent of the endocardial membrane. We are sure that it occurs a good deal about the valves. I have not seen for a few years past a heart which I used to show, in the left ventricle of which there was a perfect layer of false membrane attached to the natural tissues, a lining inside of it, of a membrane that could be easily torn off, and was in a great degree torn off by frequent inspection. When we first received it it was perfectly lined by this false membrane. It seems that such specimens are rare, for you find no mention of it in the books, or at least I have seen no mention of it, and the tendency of persons who write about diseases of the heart is to confine the inflammatory action to the valves. Now, it is not necessary that the inflammatory action should be confined to the valves, even from what we see. If there is an exudation upon the border of the ventricle, here, for example, on this part of the endocardium, it will be washed off by the current of blood that is continuously flowing, and flowing with a good deal of force, through the heart. You ask why it would not be washed off from the valves? Because it holds fast there. The effusion is between the folds that make the curtains of this valve, on the attached surface of these folds, and it cannot readily get out. Then there is a form of inflammation, called ulcerative endocarditis, that attacks any portion of the endocardium. I will explain that further on. The point, then, I make is, that because the results of the inflammation are found only in and about the valves, it does not follow that the whole endocardium may not have been the seat of disease.

Then the question occurs, what changes take place in the endocardium during this process? I do not know whether it becomes red, except by analogy. Nobody has ever seen the endocardium at the commencement of endocarditis. We cannot say, then, that we know the membrane is red. We can infer it is probable, because membranes that are inflamed anywhere else, so far as we know, are red at the beginning of the inflammatory process, becoming less and less red as the inflammation exhausts itself. Roughnesses are not commonly made, except in particular kinds of inflammation, upon the body of the endocardium, but here at the valves. Now, then, the kind of production that you may expect from endocarditis is, first, a thickening of the valves; and second, a growth, either upon the valves or near them (and this is not constant), of little eminences—little granulations, you might call them—which are described as being firm at the base, and by microscopical examination found to be composed of connective tissue at the base, but of new and soft cells at the top, so that the base of these little granulations is firmer than the apex. You will see some of them figured in this engraving, and here they make a sort of ornament—to our eye only, not to the patient's—a sort of ornament just below the edges of the aortic valve. Here are some of the same kind of things, with an addition, too, and that addition is the most important fact, perhaps, in the whole history of endocarditis. Little granulations are formed upon these valves, as in that instance, and then the blood has precipitated its fibrine upon these rough surfaces. You are, perhaps, aware that if, in an animal, a thread be run through a vein or artery so as to pierce it about its middle, the fibrine will collect upon that thread and form a clot, a considerable little ball; or it will be swept in the direction of the circulation. Any rough body in an artery, or in the heart, or in a vein, will cause a coagulation of blood about it, the fibrinous portion of blood making the clot. Well, here this roughened surface has become encrusted, so to speak, or covered by a coagulation of fibrine, having some blood-coloring matter in it to give it a red color. Now, that is the worst thing that can happen in endocarditis, for the reason that these concretions, these aggregations upon any rough surface of the heart, are apt to be washed away and carried into the organs of the body—into the brain, not infrequently; perhaps more frequently than into the spleen; rarely to be found in the liver, because the liver circulation from the heart direct is feeble (one small artery), being supplied chiefly by the portal circulation. But the brain lesions

are the worst, and this embolism carried from the heart valves most frequently, or from any portion of the heart, to the arteries of the brain, will frequently produce apoplexy, of course, a pretty grave matter. Then the principal points to be noted with reference to the effect of endocarditis are: First, thickening of the valves by an effusion between their folds; and, second, these granulations growing up in different parts of the endocardium, mostly upon the valves which have lain traps and caused a deposit of fibrine of blood upon them, making what we usually call vegetations, and these are constantly apt to be washed off and carried into important parts of the body and do serious harm.

Now, the material that produces the thickening of these valves is not exactly like ordinary false membrane. The inspection of it by the microscope, when it is recent, shows that it is a transparent, opaquish fluid, filled with new cells, not of the kind that we refer to pus, but of those that are suitable of combining and being propagated into fibrine. The false membrane met with in endocarditis is made in a different way from ordinary false membrane, with which you have already become somewhat familiar. It has no property of its own. It is coagulated into fibres by the addition of acetic acid; at least, Virchow says so, and he compares it with mucine. This product may, at first, swell the valve considerably, and afterward contract by the absorption of its fluid part, and then it may become organized within the two folds of the valves. Well, what will be the result of that? Quite a thickened and clumsy valve. And as this new material contracts it contracts the valve, the valve is shortened so that it cannot reach its fellow in the middle of the artery, and it is very much stiffened and hardened; it is of the consistency of leather sometimes. I shall show you some specimens that will illustrate that point. Now, that defect is the cardinal one. The valves are thickened, they are shortened, they are stiffened, they cannot perform their office. The result of that is, obstruction, and again, regurgitation, one or both, as may occur in a particular case.

Now, then, with reference to the recognition of these changes as they are coming on. You sometimes can do it, and sometimes cannot. Endocarditis is very apt to occur with pericarditis, and while you may be able to recognize pericarditis to your full satisfaction, you will be lingering in doubt, very likely for some time, whether there is endocarditis or not.

One point I passed over. There may be a grade of inflammation of the endocardium and of the valves that will not produce this mucine matter, but merely œdema. The valves may become thickened by becoming bags of water. Now, that is a form of disease that is sometimes recognized, not by the rational signs. To recognize an endocarditis by rational signs is impossible, and perhaps that is a good reason why it waited to be recognized during life till auscultation became an art, and it may, in that sense, be called the child of auscultation. The deformities of valves were known long before auscultation was practiced, but how to recognize endocarditis waited for auscultation. Now, when this œdematous effusion occurs, the valves are obstacles to the free flow of the blood, and produce a murmur. If, then, you have listened at a particular time to the heart and found no murmur of any kind, and you have symptoms of a very vague kind, and you suspect endocarditis, if you listen again you may possibly hear an endocardial murmur, and it is very likely to be at the aortic opening.

(To be Continued.)

Communications.

THE RELATION OF SEX TO CONSUMPTION OF THE LUNGS.

BY T. S. SOZINSKEY, M.D., PH.D.,
Of Philadelphia.

The bearings of sex on the occurrence of consumption of the lungs is a subject on which, so far as I know, very little has been written. In the series of lectures on the disease, by Dr. Pepper, which was published in this journal last summer, not a word was said about it; nor is it referred to in Flint's, or Roberts' treatise on the practice of medicine, or Parkes' on hygiene. Dr. Bristowe disposes of it, in his work on practical medicine, as follows: "The influence of sex is uncertain."

The remarks which precede might well lead one to believe that sex has little or nothing to do with the occurrence of the disease. Yet in a book of mine recently published ("The Care and Culture of Children"), in which, by the way, considerable attention is given to the mortality and allied features of diseases, may be found the following remarkably striking passage: "Between ten and fifteen years of age the deaths from it [consumption of the lungs] are twice as numerous among females as males, and between fifteen and twenty well on to three times as numerous." Evidently either this statement must be untrue or sex has in some way not a little to do with the occurrence of the disease.

Now, I may say that the statement of mine just quoted is indeed somewhat open to criticism. I am disposed to modify it so as to make it read as follows: Between ten and fifteen years of age the deaths from consumption of the lungs are twice as numerous among females as males, and between fifteen and twenty well on to twice as numerous. Still, according to the official Report of the mortality in the United States during the Census year ending June 1st, 1870, of the deaths of persons of from fifteen to twenty years of age due to the disease it appears that in Alabama eight were of males and thirty-six of females; that in Rhode Island fourteen were of males and forty-three of females; that in Delaware four were of males and thirteen of females; that in Connecticut twenty-two were of males and fifty of females; and that in Kentucky seventy-two were of males and one hundred and seventy of females. In about a third of the States, of the deaths of persons of from fifteen to twenty those of females were considerably over twice as many as those of males.

It may be taken as a fact, then, that among persons of from ten to twenty years of age about twice as many females as males die of consumption of the lungs. This being so it is assuredly worth while to examine and see what the relative mortality of the sexes at other periods of life is, from it.

The following table gives the mortality of either sex at different periods of life, from consumption of the lungs, in the United States as a whole and in the States of Pennsylvania and Massachusetts during the Census year ending June 1st, 1870:—

Period of life.	Mortality in U. S.		Mortality in Penna.		Mortality in Mass.	
	Males.	Females.	Males.	Females.	Males.	Females.
Under 5	2274	2209	234	235	178	192
5—10	459	494	35	45	25	44
10—15	501	1056	51	75	32	67
15—20	1756	3431	200	317	125	283
20—25	3933	5138	385	508	290	394
25—30	3904	4684	464	515	284	360
30—35	3329	3556	358	391	227	246
35—40	3262	3215	368	312	218	231
40—45	2611	2422	278	273	164	169
45—50	2423	1843	288	189	147	135
50—55	2130	1655	233	176	124	124
55—60	1687	1231	196	116	106	112
60—65	1704	1407	182	147	145	118
65—70	1341	1172	151	136	88	92
70—75	1118	993	120	125	92	89
75—80	745	696	90	84	50	61
Over 80	726	706	77	72	69	60

From the above table it would seem that, as a whole, in persons under five years of age the mortality from consumption of the lungs among males is greater than among females. In all, or nearly all constitutional diseases this is the case, I believe.

From five to ten years of age females are more liable to have the disease than males. This is markedly the case in Massachusetts; in which State the deaths from it among the former are almost twice as many as among the latter.

Among persons of from ten to fifteen over twice as many females as males succumb to the disease. This statement does not hold good in Pennsylvania.

Among persons of from fifteen to twenty nearly twice as many females as males are destroyed by the disease. The proportion is considerably less than this in Pennsylvania.

The figures given show, therefore, that as stated above the deaths from consumption of the lungs among persons of from ten to twenty years of age consist of about two females to one male. Indeed, among persons of from five to twenty this is nearly the proportion at least in the State of Massachusetts. The proportion of girls to boys who die from it is far greater in that State than in Pennsylvania.

In this connection I may say that of the deaths from the disease in Philadelphia, of persons within their twentieth year of age, there were, in 1876, one hundred and thirteen males and two hundred and nine females, in 1877 one hundred and eight males and one hundred and seventy-one females, and in 1878 one hundred and fourteen males and one hundred and ninety-four females. The published mortality statistics of that city afford no more information than this, as to the number of deaths of either sex from it at different periods of life, except the number of those of each collectively, in persons over twenty years of age.

Returning now to the table above, I would remark that among persons of from twenty to twenty-five about a quarter more females than males die of the disease. In both Pennsylvania and Massachusetts a third more females than males die from it—the proportion being at this period about the same in the two States.

Among persons of from twenty-five to thirty about a sixth more females than males die from the disease. The proportion is less than this in Pennsylvania but greater in Massachusetts.

Among persons of from thirty to thirty-five, about a twelfth more females than males die from the disease, not only in the nation at large, but in both Pennsylvania and Massachusetts.

From the age of thirty-five forward there are more deaths of males than females from the disease. This statement holds good as regards the deaths from it in Pennsylvania, but not in Massachusetts. From forty-five to fifty, from fifty to

fifty-five and from fifty-five to sixty, a third more males than females die from it. In Pennsylvania, the deaths of males are over a third more than those of females, at each of these periods; while in Massachusetts the number of deaths of females is somewhat greater than that of males at each period.

The entire number of deaths of males from the disease during the Census year in the United States was 33,971, and of females 35,925. In Pennsylvania the deaths of males numbered 3750, and of females 3731; and in Massachusetts the deaths of males numbered 2855, and of females 2802. From these figures it would appear that as a whole there is a considerably larger number of deaths of females than of males from the disease. This is emphatically so in Massachusetts, but in Pennsylvania the number of deaths of either sex is almost the same. Of the deaths from the disease in Philadelphia in 1876 there were 1288 males and 1388 females; in 1877 there were 1142 males and 1207 females; and in 1878 there were 1154 males and 1337 females.

Almost every practicing physician must, doubtless, have observed that the number of cases of consumption of the lungs in females is greater than that of males in early life, but not many, probably, suppose that the difference is so marked as the figures given indicate.

Now, how is the greater prevalence of the disease among females than males in childhood and youth to be accounted for? Sex, *per se*, may have something to do with it, but I believe that the mode of life is the main cause of it. Were the young of either sex brought up similarly it is improbable that the deaths of the one would greatly outnumber those of the other. Girls are not generally allowed to exercise as freely as boys, and are confined more closely within doors. From the fifth, or sixth year of age forward their entire plan of existence is very unlike that of boys; and that it is less hygienic scarcely admits of any doubt.

The greater proportion, as regards sex, of deaths of young females in Massachusetts than in Pennsylvania cannot be easily accounted for. Assuredly, some climatic, or social influence, or influences of both these kinds are at work to produce it.

The greater number of deaths of males than of females from the disease among persons of middle age is remarkable. It would seem to indicate simply that the mode of life of the former is less in harmony with their environment than that of the latter.

The much greater proportion, as regards sex, of deaths of males of middle age in Massachusetts is very singular. Possibly, I should say that the greater proportion, as regards sex, of deaths of females of middle age in Massachusetts than in Pennsylvania is very singular. The fact that there is a slightly greater proportion of women to men in the former than in the latter State may have something to do with the matter, but, doubtless, this is only one of the reasons for it.

That consumption of the lungs is largely due to other than hereditary causes is very clearly indicated by the figures given above. The strange features of the mortality from it, of either sex, in Pennsylvania and Massachusetts, which have been pointed out can hardly be, to any great extent, due to influences of an hereditary nature. Unhygienic living is beyond all question the chief source of the appalling mortality from this, the most fatal of all diseases. Constitutional degeneracy, induced by breaches of the laws of health, is the fount, *par excellence*, not only of consumption of the lungs, but of the majority of other diseases.

Such information in respect to the disease as that which precedes serves to show that through individual efforts the ravages of it might be greatly lessened. Were children reared intelligently and so instructed that in after life they should know how to preserve and foster health and strength, the average vigor and longevity of the race might be very considerably increased. There is a pressing need for an apostle of health among us whose words might be heard and heeded by the multitude.

At least one important lesson as to the treatment of the disease in its remediable stage may be drawn from the above considerations; which lesson is this, that in such measures as will improve the general health lie chiefly the means of cure. This truth is far from being as well known as it should be. Hundreds, nay thousands, die of the disease yearly, from the fact that precious time has been wasted, in their cases, in the search for purely medicinal means of cure. Nor have medical practitioners in general nothing to do with this. There are multitudes of them who seek but little anywhere, except in the stores of apothecaries, for the weapons by which to strike powerless this fell destroyer of mankind. And one hears almost daily of experimental searches for remedies among articles which a person of a little common sense would at once cast aside as void of special virtues. To-day a disagreeable substance—blood, for instance—which cannot in the nature of things be of more account than any of many ordinary items of diet, receives the ephem-

eral confidence of the profession, as having in it, at any rate, the promise of great things, and to-morrow something else. All of which goes to prove that when unguided by enlightened reason a man cannot practice medicine to much purpose, so far as the welfare of his patients is concerned.

Hospital Reports.

HOSPITAL OF THE UNIVERSITY OF PENNSYLVANIA.

A CLINICAL LECTURE, DELIVERED MAY 8, 1880, BY WILLIAM PEPPER, M.D.,

Professor of Clinical Medicine in the University of Pennsylvania.

REPORTED BY WM. H. MORRISON, M.D.

A Large Pleural Effusion of the Left Side.

GENTLEMEN:—I bring this patient again before you to discuss the further stages and treatment of her condition. It has been now about a month since you saw her. You will remember that she had a large left-sided pleural effusion, where the nature of the effusion was open to some doubt. Soon after coming in she had an abrupt rise of temperature, of brief duration. We came to the conclusion that this fever, which was accompanied by a severe attack of strangury and other symptoms of irritation of the kidneys, was due to the action of a large blister. Previously the temperature had been low and the general symptoms did not indicate that the effusion was purulent. At the same time, I called your attention to the fact that this acute attack of fever indicated a sensitive state of the system, in which there would be a predisposition to unhealthy complications.

Since then the course of the case has been peculiar. The action of the blister caused a decided reduction of the effusion. This may be taken as positive proof that at that time the effusion was severe. I am sorry to say that this condition did not continue, but after we had gotten resonance down to the second interspace (dullness had before extended to the apex) after the temperature had fallen to 99°, five days after admission, it again went up to 102°. Since then the evening temperature has never been normal. The temperature has ranged between 99.5° in the morning, to 101°, 101.5°, and occasionally 102°, in the evening, indicating a constant remittent fever of a hectic type. This has been going on for about three weeks. I must acknowledge that lately this febrile action has een growing less, and for the last five days we have had a morning temperature approaching 99°, and an evening temperature a little below 101°.

Our treatment during this time has consisted of the applications of successive blisters. Three large blisters have been applied, first on the front, then on the back, and then on the side. These have been applied at intervals of about a week. The internal treatment has been iodide of potassium and digitalis. She has been kept absolutely at rest. We have tried to control the fever by quinia, and have given her a good nourishing diet.

I have not examined her chest for a little while, but I think the time has come to decide whether or not to perform paracentesis, and I have brought her before you to-day to settle this question.

Her general aspect is good; her expression easy. The tongue is clean, except a slight coating at the back. Her appetite is pretty good, and her bowels regular. On percussion, the resonance is good down to the third rib; there is some resonance at the fourth rib, but at the fourth interspace there is flatness. As she sits up the level of the dullness does not vary more than half an inch. Posteriorly, the dullness extends higher than in front. On auscultation over the right side there is a perfectly healthy respiratory murmur; on the left side there is a respiratory murmur heard all down the back. You will observe that I directed her to open her mouth and not make a noise in breathing. This is a little matter, but one of extreme importance in determining the existence of a pleural effusion. You may have a large effusion filling the whole chest, but to your surprise, on auscultation, you will hear a blowing sound—bronchial breathing—which may seem quite close to the ear, and you may conclude that instead of having a pleural effusion, you have a consolidation of the lung. This blowing breathing may be due to the tracheal sound transmitted through the tense chest walls, at least, that is the way I think it is transmitted, for the ribs are raised and the intercostal tissues are on the stretch, so that the loud breathing is carried either through the liquid or the chest walls to the ear. Before deciding that you have bronchial breathing be sure to see that the patient is not making a blowing sound in the chest.

Now, in the present case, when she was making a noise in her throat in breathing, the sound was transmitted very distinctly to the ear; but when I stopped that I heard vesicular breathing, not perfectly natural, it is true, but still distinct and of a slightly blowing character.

You will observe, then, dullness behind, to the spine of the scapula, a little higher than in front, and when raised from the recumbent posture the line of dullness does not materially change, as it would if the liquid were free to move. We have to deal here with a mass of plastic lymph over the back of the chest, which is not considerable enough to entirely compress the lung, but allows it to expand slightly. In other words, the absorption of liquid has been going on satisfactorily, but it has left behind a large quantity of plastic lymph.

Our line of treatment is, therefore, very plain. There is no excuse for operative interference, for in spite of the febrile temperature, the absorption has been going on satisfactorily. The same irritation that has caused this deposit of lymph has, I think, been the cause of the remittent febrile action. This woman is getting better and the effusion is being absorbed, but it will take a long time for the absorption of this plastic matter. I have found dullness, imperfect respiratory murmur and impaired movement remain for many weeks, and even months, dependent upon a large amount of plastic matter.

This case is a very instructive one, as showing

us that we should never be guided entirely by the irritative fever as indicating pus in the chest, but that we should combine with this a careful study of the other symptoms and the effect of treatment.

I shall put another blister over the back as soon as she can bear it, and continue the use of digitalis and the iodide of potassium.

Peri-nephritic Abscess.

The next patient, a miner of Luzerne county, applies, with the following brief statement: He has been troubled for some time with an abscess, discharging in the back. The origin of this abscess is open to a good deal of doubt. When four years old a calculus was passed by the urethra. When twelve years old another was broken up in the urethra and washed out. Since he was thirteen years old there has been pus in the urine. The amount is now quite considerable. Six years ago he noticed a lump in the left lumbar region, which proved to be an abscess, and opened five years ago. It has discharged ever since. There is no pain complained of. Pain is not caused by rough riding, jumping, etc. He says that some portions of stone were taken from the opening in the back, last January.

This appears to be a case of peri-nephritic abscess, connected with calculous pyelitis, with perforation of the pelvis of the kidney and the escape of fragments of stone into the peri-renal connective tissue, opening later in the lumbar region; a rather unusual condition. This opening is not in the common place for a discharge from caries of the vertebræ. It is outside of the line of the erector spinæ muscles, and some distance above the crest of the ilium. Although a vertebral abscess may burrow through the connective tissues, and escape outside of the fascia, and perforate in the lumbar region, yet it is not commonly so far out as this; still I should not attach too much importance to the locality of the opening. You know that many of these abscesses from diseased vertebræ become psoas or iliac abscesses, and burrow down and appear anteriorly.

This patient has presented to us none of the symptoms of vertebral caries. There has been no spinal tenderness. There is no scrofulous or tubercular diathesis or condition present. Physical examination of the vertebral column has not shown us any lesion there, and the history of the case points in an entirely different direction.

It points very strongly to some calculous and nephritic trouble. Thus, as early as the age of four he passed a calculus by the urethra; eight years later another lodged in the glandular portion of the urethra, and was removed by breaking it up and washing out the pieces. Subsequently pus appears in the urine, not from cystitis, but evidently from inflammation of the higher parts, the ureter and pelvis of the kidney. Later still an abscess forms and discharges in the back, from which opening fragments have been taken, which, unfortunately, have not been preserved, but they are said to have been calculous in their nature, and not from caries of the bone. Much information would have been gained from these fragments, but the course of the case and the absence of marked symptoms of spinal trouble cause me to regard this as an abscess around the kidney, from perforation of the pelvis and the discharge of fragments of stone, or other irritating matter.

If this is so, this is one of a class of cases which have recently been made the subject of some daring operations in surgery, of a character to which I cannot altogether give my consent. For instance, an incision has been made in the lumbar region, the pelvis opened, a calculus extracted, the parts carefully washed out and the urinary fistula thus formed allowed to heal, and the patient restored to health, after years of suffering from the exhausting drain of pyelitis. Not only that. Of course, a peri-nephritic abscess should be opened, but in some cases, after the abscess has been opened the substance of the kidney has been found inflamed and destroyed, and the kidney has been removed, the ureter tied with the animal ligature, and one or two cases have terminated in recovery, but this has led to the operation being performed in cases which have resulted fatally, and where the patient's life could have been made comfortable without the risk of so dangerous an operation.

The first question to be determined in any case is the diagnosis of calculous pyelitis, and the second is the treatment to be pursued. Calculous pyelitis is the name given to an inflammation of the lining of the kidney, the pelvis and its branches or infundibula, dependent upon the presence of a calculus, setting up irritation and inflammation and causing a purulent discharge. It is not a rare disease.

The symptoms which indicate it are, in the first place, the appearance in the urine of pus. This pus is not of the kind that comes from the bladder, that is, mixed with mucus. In cystitis there is nearly always a greater quantity of mucus than pus, but in pyelitis the pus is unmixed with mucus, unless the case is complicated by cystitis, and then the diagnosis is very difficult. When we examine the pus cells with the microscope they have the appearance of having existed for some time. They are not as smooth or unwrinkled as the pus cells of cystitis. With this there is nearly always a considerable proportion of albumen, depending upon the admixture of the liquor sanguinis. There are no tube casts, unless there is associated some inflammation of the substance of the kidney. From time to time there is apt to be a little hemorrhage from sudden congestion or from some unusual exertion causing the stone to scrape against the mucous membrane; but there is usually not so much bleeding as in vesical calculus. The pain is referred to the region of the kidney on one or other side. Pain is caused by deep pressure. There is also another pain very characteristic, that is, after a jar of any kind a sharp, acute pain may be felt in the region of the kidney.

The presence, then, of pus in the urine without much mucus, the occasional admixture of blood which may or may not occur, the absence of morbid vesical symptoms, and, of course, the evidence of the sound, showing that there is neither a stone in the bladder, nor a ribbed bladder, which may occur in an old cystitis, pain re-

ferred to one or other kidney, particularly if excited by deep pressure or sudden exertion, are the symptoms which will lead us to the diagnosis of calculous pyelitis. Particularly so, if they occur in a person with a calculous diathesis, a uric acid or oxalic acid dyspepsia.

In such cases treatment will often do a great deal to relieve the patient's suffering. Quiet, extreme care in diet, the use of mineral waters suitable to the diathesis present, the use of large doses of iron in its diuretic salts and continued counter-irritation will do much to render the patient comfortable.

Occasionally, fragments of stone will be discharged and all the symptoms disappear. In other cases, the symptoms will subside without the calculus being discharged, and you may infer that it has become encapsuled. In very rare cases, the inflammation of the pelvis gives rise to the condition that seems to have followed here, and which I have seen follow in cases like this. That is to say, the inflammation is attended by ulceration, and the connective tissue around the kidney becomes implicated and takes on a suppurative action; or, possibly, the ulcer may perforate the pelvis, the urine and pus may escape into the peritoneal tissue, setting up suppurative inflammation. This abscess may kill the patient before it is diagnosed, or it may discharge in one of several directions; the most common being where this opening is, below the ribs and outside of the sheaf of the erector muscles. When an abscess points in this region, it is to be distinguished from an abscess resulting from caries of the rib, of the vertebræ, and sometimes of the crest of the ilium. This diagnosis is sometimes exceedingly difficult to make, but if we have a history as clear as we have here, I do not see how we could refuse to diagnose the case as a perinephritic abscess.

The question here is to decide whether this is to be left alone, or whether there are any fragments of stone which should be removed. I have been unable to get a probe into this sinus. It appears to be closed at present. I do not think that cutting down on these abscesses seems to do much harm, and certainly dilating this opening to see if there was any calculus, would not; but if we could detect no calculus, this young man's health is so good, and the trouble caused by the abscess so slight, that I do not think we would be justified in performing any serious operation. I shall keep him in the house a little while, but if there is not much discharge I shall leave it alone, and have him return in six months. If there is much discharge, I shall dilate the opening with a sponge tent.

I shall treat him for the pyelitis. I would put him on a good diet, nourishing and digestible, consisting of a moderate quantity of meat once a day, but for the most part of vegetables, milk, the grains and farinaceous articles; care in dressing; the use of a flannel belt around the middle of the trunk, to protect from chills; the avoidance of damp and sudden changes of temperature; a quiet life, some sedentary occupation, total avoidance of any active work, and the internal use of iron in a diuretic form.

One of the most agreeable and useful forms of giving iron is in combination with such a diuretic as acetate of ammonia. This combination has become popular under the name of Basham's mixture:—

℞. Tinct. ferri. chloridi, f. ʒ iiss
Acidi acetici diluti, ʒj
Syr. aurantii corticis, *vel* curacoæ, ʒj
Liq. ammonii acetatis, q.s.ad ʒv. M.

Sig.—ʒss four times a day, in water, after meals.

The dose of the tincture of iron has to be varied for different cases. The tincture of the chloride of iron and the liq. ammon. acetatis may be kept separately and mixed at the moment of taking.

Typhoid Fever.

This is the fever case I showed you last Tuesday, and to the symptomatology of which I devoted the whole hour. I want to give you an opportunity of watching the natural history of typhoid fever, in a well marked case, under the simplest of all treatment.

He came in, I think, on about the fourth day of the disease (the third of May) so that to-day (Saturday) is about the ninth day. You will remember that the symptoms were unmistakably those of typhoid fever. There was an absence of two symptoms which are constantly mentioned, and are frequently present, viz., epistaxis and eruption. There was no eruption when we last saw him.

Let us look to-day. Several red spots at once attract our attention. I feel them, but they are distinctly papular. The eruption of typhoid fever is scarcely at all elevated above the skin; is of a rather pale red or rose color, either round or oval, lenticular, and about a couple of lines long by a line and a half wide. It disappears on pressure but returns immediately on its removal. In other words, it is merely a patch of congestion of the skin with a very trifling effusion in the skin. The spots usually first appear about the epigastric region. They come out about the seventh day. Here are some spots of a paler red, and with these some brownish spots, which are freckles. The little pale spots are worthy of careful study. They were not here two days ago. I press upon one of them; it entirely disappears. It is small, rounded and not raised above the skin. I would not be willing to attach much importance to any of these spots, except the one to which I have called attention. The same mottling of the skin exists that we saw on Tuesday. On the back there are some red spots, which, without being characteristic, are suspicious; but the course of the fever, the distention of the abdomen, the looseness of the bowels, the condition of the mind, the state of the tongue, the condition of the circulation, and the existence of bronchial irritation, render the diagnosis sufficiently certain.

The treatment of this man has been as follows: First, absolute rest, in bed. Now, I consider this a reasonably bad case of typhoid fever, for by the sixth day the temperature was 103.5°, and on the seventh 104°. This is a moderately high temperature, but not at all threatening or alarming. The pulse was 112 and the respira-

tions 32 per minute. He has had no stimulants at all, because there were no exhausting discharges, the nervous symptoms were mild, and the pulse of fair volume.

Secondly, he has had, as his bowels were loose and tongue coated, nothing but milk and water—two parts of skim milk and one part water, probably about fifty per cent. of milk. Of this he received f. ℥ vj every two hours—seventy-two ounces of liquid in the twenty-four hours, containing three pints of skim milk.

In order to exert an alterative and sedative effect on the inflamed mucous membrane of the bowel, which is the lesion, the source of the greatest danger and the cause of many of the symptoms of typhoid fever, I gave a pill containing one-sixth of a grain of nitrate of silver and one-eighth of a grain of powdered opium, four times a day.

His temperature has been going steadily down. This morning it was 101.4°, and the pulse 96 per minute. During the second week, instead of this man growing hotter, more restless, dull, with a dry, brown tongue and increased mental disturbance, we see all the symptoms taking a favorable turn. His fever has not been combated by bathing, the cold pack, or other severe measures. We have endeavored to prevent excessive surface irritation, believing, as I do, that this surface irritation is a fruitful cause of the elevated temperature, of a great deal of the nervous disturbance and many of the general symptoms. I think that if we can prevent or modify the development of these local lesions, we shall prevent development of those grave general states that sometimes call for such heroic treatment.

Medical Societies.

STATED MEETING OF THE PHILADELPHIA LARYNGOLOGICAL SOCIETY, NOVEMBER 26, 1880.

Before the meeting was organized Dr. Cohen exhibited a case of prolapse of the laryngeal sack (inversion of the ventricle), and Dr. Bean a case of goitre, which were examined by the members present.

The meeting was then called to order by the President, Dr. Cohen, and after the minutes of the previous meeting had been read, Dr. Harrison Allen read an interesting paper on "Retro-Pharyngeal Abscess in an Adult." This paper was discussed by Drs. Cohen, Turnbull and Allen. In the discussion Dr. Cohen suggested that it would be a good plan to use the aspirator for the removal of pus in such cases and of serous effusions in cases of œdema of the larynx.

Dr Cohen then read a letter from the patient with stenosis of the larynx, which he had exhibited at the last meeting, the letter stating that the case was progressing favorably. The Doctor also reported the history of a case of paralysis of one of the vocal cords and of several of the muscles of the body, of syphilitic origin, which was slowly improving under the iodide; and a case of congenital syphilis, in which the whole of the soft palate had been agglutinated to the pharynx, so that there resulted a complete stenosis of the posterior nares, and in which the uvula was absent.

Dr. Seiler stated that he had seen a similar case, in which, however, the stenosis was not complete.

Dr. Bean then presented a specimen of aneurism of the aorta pressing upon the recurrent laryngeal nerve and upon the trachea, together with a history of the case and a report of the post-mortem examination. The specimen, after examination of the points of interest, together with the case, were then discussed by the members present.

Dr. Cohen then referred to the case of prolapse of the laryngeal sack, reported at the last meeting, and the patient being present, the latter gave a detailed history of his case. He stated that the trouble had been of several months' duration, and was brought on, as he believed, by a severe fit of coughing, but that the protrusion of the mucous membrane was gradually diminishing in size under the influence of an astringent powder blown into the larynx. Having learned to use the laryngoscopic mirror on himself, he was enabled to watch the progress of the trouble. The subject of inversion of the ventricle was then at length discussed, and the rarity of such cases as the present one was dwelt upon. Dr. Cohen proposed to change the name of this affection to "prolapse of the laryngeal sack," inasmuch as it was not the ventricle which became inverted, but the mucous membrane lining the same.

Dr. Cohen then, for Dr. I. Barton, who was absent, reported a case of goitre, in which the treatment had been painting the tumor with iodoform dissolved in collodion, which was followed by marked reduction in the size of the growth. The subject of goitre and of iodized collodion was then discussed by most of the members present.

Dr. Turnbull reported a case of chronic abscess of the tonsil, producing spasmodic cough, induced by the pus running into the larynx; and Dr. Cohen reported a case of spasmodic cough, due to a small erosion in the inter-arytenoid fold. The subject of spasmodic cough was discussed by Drs. Allen, Turnbull, Cohen and Seiler.

After fixing the time and place for the next meeting, the Society, on motion, adjourned.

Carl Seiler, M.D., *Secretary.*

MEDICAL AND SURGICAL SOCIETY OF BALTIMORE.

Cases of Syphilis.

Dr. Cathell. A young lady, perfectly respectable, consulted me about some simple disease, when I noticed that she had a suspicious eruption. I made inquiry as to a sore upon the genitals, which she positively denied. She recollected that about four months ago a young man boarded at her house who was suffering from a sore mouth. Upon one occasion he kissed her, and some weeks after she had a sore on her tongue and enlarged glands under the jaw. I think I am justified in believing that this was the initial lesion of syphilis. I treated her for syphilis and she got well.

Dr. Morris. A young lady consulted me about

a sore mouth, and, as I thought it might be from decayed teeth, I sent her to a dentist for examination. While we were there a young gentleman joined us, and taking me aside, told me that he had contracted the disease from a water closet, and possibly might have infected her by kissing. He subsequently married her, and the offspring were syphilitic.

Dr. Rohe. I have a case now under treatment. A lady was married about three years ago. Six weeks ago I was called to attend her for rheumatism, and found her covered with syphilitic roseola. Since then she has had paralysis, and lately her eyes have become affected. Both she and her husband assure me that they never had any sore, but I do not believe the man.

Dr. Erich. A young lady, aged 16, consulted me about an eruption. The idea of syphilis never occurred to me. I prescribed for her and she went to the country for the summer. When she returned in the fall she was covered with the eruption and seemed to be completely broken down. Then I remembered that I had attended her father for patches in his mouth some months before. She was put under proper treatment and made a good recovery, and seems to be entirely free from the disease.

Dr. Lynch. I attended a young man who, I believe, contracted the initial lesion from a pipe which a sea captain had smoked.

Embolism.

Dr. Rennolds. I attended a lady in confinement, and as it was a tedious labor I used the forceps. She suffered no inconvenience from their use and was doing finely until the eleventh day, when, while she was sitting in her chair, she complained of severe pain in her chest, smothering, etc., and died in a few hours.

Dr. Brinton. I lost a case in precisely the same way. I was called hurriedly to see a lady who was suffering from great dyspnœa, pulseless, and extremities cold. She was perfectly rational. I ordered stimulants but she was dead in half an hour.

Dr. Cathell. A lady went to bed perfectly well, and during the night awoke with similar symptoms. I was hurriedly summoned, but before I arrived she was dead. As she had had an attack of colic a short time before, I, not knowing but that it might be another attack of that kind, took my hypodermic syringe with me. Just before death her respiration was stertorous, and had any morphia been used it might have been thought that the opium contributed to the fatal result.

Dr. Lynch. The cases of sudden death after the use of the hypodermic syringe are caused by the injection of air, and not because the morphia has been injected into an artery or vein.

Multiform Sarcoma.

Dr. Erich. This man, 72 years old, has suffered for about two years. He has about sixty tumors, of different sizes, distributed over his body and limbs. One about the size of an egg is seated on the left temple, and another, the size of a chestnut, at the inner canthus of the right eye; this last one is nearly black in color. About six months ago two tumors, one on the right shoulder and the other just below the inferior angle of the left scapula, were removed by Dr. Gaitley. As a result of the operation fungoid growths occupy the places of the original tumors. He suffers considerable pain and constitutional disturbance. Two tumors have disappeared, as a result, he thinks, of a liniment he was using. The skin is freely movable over the tumors. There is some doubt about the diagnosis, between sarcoma and carcinoma, which only the microscope can decide.

Dr. Coskery. The case is one of considerable doubt. I believe the case to be one of multiple lipoma. Sarcoma being a connective tissue growth is found most frequently in early life, say from twenty-five to thirty years. According to his account the tumors two years ago were the same size they are now. In moving the tumors, one on the thigh is fixed, and many of them move in the skin. The dark color of the one on the eye is due to pigmentation. The fungous masses on the shoulder and below the scapula I believe to be encephaloid cancer, due to the operation for their removal and friction and pressure of the clothing. It was a great mistake to attempt removal of them in a man of his age. On his back, low down, is an undoubted lipoma, and that I believe is the diagnosis—multiple lipoma. The only thing against this is that lipoma is of slow growth and not likely to have attained this size in two years.

Dr. Rohe. The consistence of a tumor is not diagnostic. The large tumor on the back of the man was discovered about three years ago. Multiple lipoma, so multiple as this, is a thing of which I have never heard. The only disease, I think, that this could be mistaken for is fibroma molluscum. A case somewhat similar, except in its beginning, has been described by Duhring. Hebra, Jr., of Vienna, reports a similar case. About fifteen cases have been reported. A case was taken into the Toronto General Hospital, about four years ago. The microscope demonstrated that it was spindle-celled sarcoma.

Dr. Cathell. About eight months ago I saw a case similar to this, with Dr. Dodge. The man was fifty-six years old; had been a soldier for fifteen years; never had syphilis, and seemed to be in good health. He had between fifty and sixty tumors the size of a walnut, and many more much smaller. Ten or twelve of them had fungous growths. None had been removed, but those occupied by the fungous growths had ulcerated spontaneously. We thought it a case of sarcoma.

Dr. Evans. Three years ago I had a case somewhat similar. A man, twenty-six years old, was taken sick, in Chicago, and some weeks after was brought to this city. The tumors were distributed all over the body. He was much debilitated, and suffered from intense headache, and gradually became blind. Drs. Chew and Van Bibber saw the case with me. The diagnosis was lymphadenoma. The man died from brain pressure.

Dr. Bates. I do not think Dr. Evans' case is similar to this. I saw his case several times. It was acute in its character; he had constant pain and there was continued fever. From the beginning of the disease until the man's death did not exceed three months.

Dr. Erich. I am still not convinced that this case is anything else than multiple sarcoma. That a few of the tumors are soft, like lipoma, does not prove that all are. That it is not lipoma I am convinced, by the tumor on the temple; it has a raised bony ridge surrounding it, which does not follow lipoma. That the ulcerated tumors are malignant I think very likely. This man is not debilitated and is able to take good care of himself. All these cases of multiple sarcoma have occurred in old persons. Until a microscopic examination is made we cannot settle the question.

Ophthalmia.

Dr. Scarff. I was attending a case of phlyctenular ophthalmia, and used instillations of calomel. The next time I saw it the case had changed to purulent ophthalmia. The calomel was analyzed, but no corrosive sublimate found in it.

A lady had catarrhal laryngitis, for which I treated her. The next day she came back; the throat was entirely well, and she had ophthalmia, for which I used leeches. The day after the eyes were well and the throat was sore, and for several days this alternation continued.

Editorial Department.

Periscope.

Syphilis in Natural Development.

Mr. E. S. Brander was Surgeon to a Hospital in the Andaman Islands, and among some other experiences related in the Edinburgh *Medical Journal*, November, gives this account of syphilis:—

Syphilis, in its various forms, was the principal cause of disease among the inmates of the Andamanese Hospital, both numerically and in the gravity of its symptoms.

The study of syphilis among these people was exceptionally interesting, as they may be supposed, prior to its quite recent introduction among them, to have been free from it entirely; and in their case, therefore, it presented the appearance of the effect of the venereal poison acting on a "virgin soil." The conditions met with differed from what I had formerly seen in European hospitals, and also from what is given in the books as the typical appearances.

Such cases as I saw early commenced, among the men, from an ulcerating sore at the edge of the prepuce and extending *outward*. In those cases more advanced the whole *outer* surface of the penis was a succession of chancroid ulcers of various sizes, with some running into each other. In many cases I saw what to me was a new feature, viz., the scrotum and perineum covered with sores of this nature. In one case, I remember that the whole scrotum, most of the perineum, and nearly all the penis, was one continuous mass of ulcerated surface. In the women, the sores on the labia were also of a rapidly spreading kind. As a rule they did not suffer so much from rapid and consecutive ulceration as the men; still there were several cases where nearly the whole extent of the labia on both sides was one continuous ulcerated surface. In addition, there were occasionally sores on the mons veneris and down the thighs. Although these large local sores were clearly due in great measure to want of cleanliness, yet the condylomatous growths so commonly found to result from want of that precaution were comparatively rare. I only remember two cases of the latter, both in men, though it was more frequent among the children congenitally affected. After a varying period from commencement of original sore, the inguinal glands became inflamed, with but little antecedent induration. They rapidly suppurated, and formed large confluent sores. In those cases where the latter were met by treatment they went no further, but in those who had come from a distance, and the sores had advanced, they presented a most extensive appearance, forming great gaping apertures of considerable depth, and involving great loss of tissue. The glands on both sides were nearly always affected, and both men and women seemed to suffer equally in this respect. These were the principal lesions, but were almost always accompanied by one or more of the following: In some there were sores about the nose and mouth, in the latter case commencing as cracks. There were two cases of ulceration of tonsil. I observed, moreover, a marked immunity from ulceration of palate, fauces, larynx, etc., so commonly found in this disease. There was no case of destruction of laryngeal cartilages, etc., or aphonia. In one case commencing ulceration across the bridge of the nose was effectually checked by treatment. In a few cases of mothers suckling children there was ulceration of nipple. The most remarkable feature, however, was a peculiar shallow and spreading ulceration of the skin. I never happened to have a case in hospital when this condition began, but I saw several shortly after, and the appearance then was that of a shallow spreading ulcer—without raised or punched-out-looking edges—and apparently only involving skin tissues, with a tendency to spread indefinitely. The loss of hair was difficult to observe, as they always shave the head. In many cases I found the surface of the scalp covered with an eruption like syphilitic impetigo, going on to syphilitic lepra, but I do not remember any case where the characteristic appearance of syphilitic rupia was seen. There were two cases of syphilitic varioloid, where the eruption was well marked on the face. The spots went through regular stages to maturation, but

never burst externally, the contents being absorbed under treatment, and only a slight desquamation resulting. The syphilitic affections of bones and joints were only found in two cases, and I did not discover any syphilitic nodes on subcutaneous surfaces.

Cases in Mental Therapeutics.

Dr. S. B. Chase reports the following instructive cases, in the Transactions of the Iowa State Medical Society:—

During a stormy night, in the winter of 1868, I was called ten miles to visit a lady supposed to be dying. On reaching the place, I found my patient in terrible convulsions, foaming at the mouth, and gasping for breath. Asking the grief stricken ones to step into an adjoining room, I calmed the storm and soon restored the sufferer in quiet to her friends. The rapidity of the cure satisfied the husband, a somewhat churlish man, of the nature of the malady. As I started homeward he followed me to the door and said, "if my wife has another fit I now know how to cure her." He subsequently assured me of her perfect health. "After you left," said he, "angered that hysterics was the cause of our anxiety and trouble, I returned to her room and sternly upbraided her. She immediately went into a most violent convulsion. Grasping a pail at hand, filled with ice and water, I dashed it upon her. With a shriek she bounded to the ceiling and fell back upon her bed, cured. I lost my patient; the cure was permanent.

Permit me to relate another case. In my boyhood I had the misfortune to break my arm. A lady, well advanced in years, whom we called Aunt Becky, was present. From early life she had suffered from epilepsy, until her mind was much shattered; yet, she was a great charmer. Her invariable custom was slowly to draw the thumb three times each way across the spot she desired to heal, forming a triple cross, and then to kiss the spot.

Great pain continuing in my arm after the surgeon had given it proper attention, Aunt Becky wanted to charm it away. Being faithless, like Thomas, I declined the proffer. A gentleman, some twenty-five years of age, was present, who for ten years had suffered from a bad fever-sore that he had in vain tried to get cured. He said, "Aunt Becky, you may charm my leg, and if you cure it I will give you ten dollars." She was much pleased at the proposition, and immediately began her charming, closing the performance with her customary seal.

The gentleman shortly returned to his home, some distance away, and I did not again see him for years; yet he soon sent Aunt Becky the ten dollars. When I did see him, he expressed great astonishment at the result, as he assured me he had not the slightest faith in the charming at the time, and only consented to the performance because Aunt Becky felt so badly that I could not let her charm my arm. He further said that he did not think of the matter again for weeks after his return home, and not until his leg began to get well. The cure was complete in three months, and has remained permanent. The gentleman is living, a man of prominence, and will corroborate all I say. Could the determination of blood to the part, during the process of charming, have wrought the cure?

The Treatment of Rupture of the Uterus.

Dr. Frommel, Assistant to the Gynæcological Clinique at Berlin, lately communicated a case to the *Zeitschrift für Gebürtshulfe und Gynækologie*, where rupture of the uterus was successfully treated by drainage and antiseptic irrigation of the peritoneum. In the *Centralblatt f. Gynækologie* for August 28th, 1880, he gives at length the histories of two other cases which recovered from the same accident under similar treatment. In the first case the muscular tissue of the uterus was entirely torn through, but the peritoneal covering was intact, though widely separated from the uterus, thus forming a large sac, into which the fœtus had escaped. The woman was put under chloroform, the whole sac thoroughly washed out with a two per cent. solution of carbolic acid, and a large drainage tube passed to the bottom of the cavity. The highest temperature the patient had after the operation was 38° C. (100.4 F.), on the evening of the sixth day, when the whole sac was irrigated through the drainage tube. On the 26th day all discharge from the tube ceased, so it was removed on the 28th, and on the 30th the patient left the hospital. In the second case the child and placenta had both escaped into the peritoneum. The fundus of the uterus was connected with the cervix by a thin band of uterine tissue. The child was turned and extracted, the placenta removed, and the abdominal cavity washed out with a two per cent. solution of carbolic acid, after which a thick drainage tube was carried up as far as possible into the abdomen, and the external end fastened to the posterior commissure by a single stitch. A firm compress was applied to the abdomen, in order to press the fundus down into the pelvis, and an ice-bag was laid over the fundus. The temperature after the operation only once rose as high as 38.5° C. (101.3 F.), and as often as it exceeded 38° C. (100.4° F.) the abdomen was washed out through the tube, under gentle pressure, with at two per cent., solution of carbolic acid. For the first few days the patient got opium, in order to lessen the peristalsis. The tube was removed on the 17th day, the patient was up on the 19th day, and was discharged from hospital, feeling quite recovered, two days afterward. When he published his first case he thought that this treatment was not applicable when the child had escaped into the abdomen, and then he recommended laparotomy, but from the second of the cases now published he has learned that this is not the case, for in it both the child and the placenta had lain in the abdomen for fully six hours.

During the first two days he injects as seldom as possible, in order not to separate the adhesions which have formed; with the same object in view he administers opium. He looks on a temperature of 38° C. (100.4° F.) as an indication for irrigation with a lukewarm two per cent. solution of carbolic acid.

Operation with Thermo-Cautery in Malignant Disease of Labium.

The following case is given in the Glasgow *Medical Journal*, December, 1880:—

Mrs. M'G., aged 69, was admitted 16th August, with a large epithelioma of the right labium. She complained of pain in the right iliac region and of fetid discharge from the tumor.

24th August. To-day, while patient was under the influence of chloroform, Dr. Reid removed the whole of the right labium, by means of the thermo-cautery, going some distance beyond the diseased tissues. No knife or other cutting instrument was used, but the cautery kept at a dull red heat, and it was found to answer the purpose remarkably well. Several vessels required to be ligatured during the operation, but the hemorrhage was only slight. The parts were well syringed with carbolic acid, the lower part of the wound brought together with silver sutures, and carbolic oil dressings applied.

The catheter required to be used only during the first twenty-four hours after the operation. Little or no pain was complained of. On the second day the sutures gave way, and a granulating surface, as large as the palm of the hand, was left: as this healed it gradually contracted, till, on September 21st, when patient left, it was much less than half the original size, and, though still of considerable extent, it had a healthy appearance with a healing margin. No trace of cancerous tissue was observable.

Patient was again seen on 1st of October, when the surface was found to be almost entirely healed, only a minute point being still left. The cicatrix was remarkably small considering the size of the original wound. She expressed herself as free from pain and discomfort, and there was no discharge.

Remarks.—In this case the disease, reaching as it did some way up the vagina, would have been considered beyond the reach of operation with the knife. The patient did not suffer as the result of the operation, and is now free from pain, so that one would not regret having operated even although the disease should recur.

Curious Accumulation of Foreign Bodies in the Stomach.

The following case is reported by Charles L. Dayton, M.D., in the Buffalo *Medical and Surgical Journal*. It demonstrates that in gastric diseases there is great difficulty in forming a correct diagnosis, and also in reaching a reliable prognosis, the problem only yielding a satisfactory solution through a post-mortem examination.

Mr. S., aged 45, residing at Black Rock, for a period of six months had complained of gastric pain with nausea, and other symptoms of indigestion. He presented the appearance of one suffering with scirrhus of the stomach, or aggravated dyspepsia. Failing to secure relief after consulting several physicians, he consented to accompany me, with a view to consult Prof. Austin Flint, Sr., at that time residing in Buffalo. Prof. Flint examined the patient thoroughly, and expressed the opinion that he would ultimately recover. Two days afterward the patient suddenly died. At the autopsy, in the presence of Drs. L. P. Dayton, Tobie and Beaman, the stomach was removed. It contained a tumberful of prune pits; the pyloric orifice was so far occluded by the induration of the surrounding tissues that it admitted only the passage of a small catheter. About three inches from the pyloric orifice the stomach was perforated, probably through the influence of the prunes. His wife stated that he had not eaten prunes in five or six months, and could offer no explanation for his swallowing the pits.

The case is interesting on account of the presence of so large a quantity of foreign substances in the stomach, of the similarity of symptoms to those usually occurring in ulceration and scirrhus, and of the obscurity often attending gastric and intestinal disease, which is cleared up only through the post-mortem examination.

Statistics of Battey's Operation.

In the Chicago *Medical Journal and Examiner*, Nov. 1880, Dr. Jackson quotes from Dr. Engelmann a table showing the result of thirty-six cases in which the operation had been performed in this country and in Europe. Of this number there were 30.5 per cent. of deaths, and 69.5 per cent. of recoveries. Of those who recovered from the operation there were—

Cured	22.8	per cent.
Greatly improved	11.4	"
Somewhat improved	11.4	"
Not improved	17.2	"
Made worse	8.6	"

Dr. Jackson adds: Now, if we add to the number of those who died, 30.5 per cent. the number of those in whom there was no improvement, 17.2 per cent., and those made worse, 8.6 per cent., we have a total of 56.3 per cent. of failures against 43.7 per cent. of successes; for while in ovariotomy performed for the removal of cystic or other disease which is destroying the life of the patient we count it a success when we save that life, a successful case of Battey's operation implies not only the saving of the patient's life, but also the removal or mitigation of her suffering.

Yet, notwithstanding this rather unfavorable showing, I heartily approve of the operation, although I believe it should be confined to a very limited field.

Management of the Cord.

At the close of an article in the New York *Med. Journal* for December, Dr. Lusk writes:—

The outcome of the foregoing observations may fairly be stated as follows:—

1. The cord should not be tied until the child has breathed vigorously a few times. When there is no occasion for haste arising out of the condition of the mother, it is safer to wait until the pulsations of the cord have ceased altogether.

2. Late ligation is not dangerous to the child. From the excess of blood contained in the fœtal portion of the placenta, the child receives into its system only the amount requisite to supply

the needs created by the opening up of the pulmonary circulation.

3. Until further observations have been made, the practice of employing uterine expression previous to tying the cord is questionable.

4. In children born pale and anæmic, suffering at birth from syncope, late ligation furnishes an invaluable means of restoring the equilibrium of the fœtal circulation.

Simple Remedy in Fetid Sweating of the Feet.

Dr. Ortega writes, in the *Gaz. Medic. Algerie* that a workman was afflicted with a continued perspiration of the feet of so fetid an odor that he had become an object of repulsion to those compelled to be in the same room with him. The epidermis of the soles of the feet was found softened, as if macerated, with several ulcerations; but the odor was so disagreeable that careful examination could not then be made. The patient was ordered a simple solution of chloral of one per cent. strength, and was directed to envelope the feet with bandages wetted in it; after two days the fetid odor had disappeared, and after six days the ulcerations were much improved in appearance.

Reviews and Book Notices.

NOTES ON CURRENT MEDICAL LITERATURE.

——The "Physician's Diary," for 1881, published by William Wood & Co., is one of the latest publications of this character in the market. It contains the usual memoranda at the beginning, and is ruled and paged in the customary manner. Except that the cover has a large and heavy flap, which is somewhat in the way, it would appear well calculated for convenience of use.

——The Board of Health of the State of Alabama have printed a pamphlet (Circular No. 4), containing reports and drafts of bills for the consideration of the Legislature of that State.

These several documents relate, in their order, to the following several subjects, namely:—

1. The supervision of the public health and the collection of vital statistics in the several counties of Alabama.

2. The regulation of the practice of quarantine in Alabama.

3. The increase of accommodations for the insane in Alabama.

4. The protection of the traveling public against accidents resulting from color-blindness and other defects of vision.

5. The nature and treatment of inebriety and the legal management of inebriates.

This plan of presenting the subjects as well to the public at large as to the Legislature, is a judicious one.

——The subject of cancer of the rectum is fully treated in two reprints by Dr. Charles B. Kelsey, of New York city, describing the operation of excision, with its indications and the precautions required in its performance.

BOOK NOTICES.

Photographic Illustrations of Cutaneous Syphilis. By George Henry Fox, A.M., M.D. E. B. Treat, 757 Broadway, New York.

The admirable series of photographic illustrations of cutaneous diseases which Dr. Fox gave to the profession in 1879–80, are, no doubt, known to a large number of our readers. We have now before us the first three numbers of a similar series on cutaneous syphilis, prepared with like fidelity and by the same process.

Dr. Fox tells us that "the study of syphilis is but fairly begun"—an alarming statement in view of the enormous activity of the syphilographers for a century past. He says of his own work that it is the result of the labor of years, and its aim is to furnish a series of life-like representations which shall constitute a panorama of cutaneous syphilis. The colored photographs are accompanied by a text, which presents a practical exposition of the subject, with special reference to points of diagnosis and treatment.

Certainly, the plates in the number before us are exquisite in finish and tone. They are not over-colored and speak directly to the eye.

The work is to be completed in twelve numbers, to contain forty-eight plates in all, and is sold at $2.00 per number.

The Descriptive Atlas of Anatomy. A Representation of the Anatomy of the Human Body. In 92 Royal 4to plates, containing 550 figures. Philadelphia, J. B. Lippincott & Co. London, Smith, Elder & Co. 1880. Cloth.

The engravings in this handsome quarto are upon stone, mostly plain, partly in colors. Without being fine, they are clear and accurate. The names, partly in Latin and partly in English, are engraved upon the parts themselves, whenever this is practicable. This adds vastly to the facility of reference. The arrangement differs a little from that usually adopted, beginning with the bones and ligaments, and proceeding to the muscles, fasciæ, special organs, viscera, circulatory system and nervous system. There is a well-made index, but no table of contents—an omission that should be remedied. The name of the author is not given, but in macroscopical

anatomy it matters little who the author is; his name would add little to the subject. The publishers state, however, that the plates have been carefully revised by competent hands. For a practical, convenient and not expensive anatomical atlas this work can be recommended.

A Practical Treatise on Surgical Diagnosis. By Ambrose L. Ranney, A.M., M.D., etc. Second Edition. New York, Wm. Wood & Co. 8vo. pp. 471.

In the present edition of this work, which has achieved a merited popularity, the author has corrected various errors of statement which appeared in the first edition, and has added a considerable quantity of new matter. He has also, in a measure, dropped the plan of presenting all symptoms in the form of differential tables, and has added new matter, largely as explanatory text.

As we described the plan of the book when referring to the first edition, we need not repeat it here. It will be sufficient to say that the author has bestowed considerable labor on this revision, and has materially added to the value of his treatise.

On the Construction, Organization and General Arrangements of Hospitals for the Insane. With Some Remarks on Insanity and its Treatment. By Thomas L. Kirkbride, M.D., LL.D., etc. Second edition, revised. Philadelphia, J. B. Lippincott & Co., 1880. 1 vol. Cloth. 8vo. pp. 320.

Probably no alienist in the world has enjoyed better advantages for the study of hospital accommodations for the insane than Dr. Kirkbride, and certainly there is none who has made better use of his opportunities. Hence the above work takes the rank of an acknowledged standard, and its perusal is indispensable to every one—physician, legislator, architect or philanthropist—in whose way it comes to form opinions on the subject.

The second edition has been revised, various sections added and new illustrations inserted. It is now the matured record of nearly half a century of observation, during the greater part of which period the author has held the responsible position of physician in chief and superintendent of the Pennsylvania Hospital for the Insane.

A Treatise on Diphtheria. By A. Jacoby, M.D. etc. New York, Wm. Wood & Co., 1880. pp. 252.

This monograph is the result of very extensive study of the disease—"thousands of cases," the author tells us in his preface. The author goes over the ground carefully, giving chapters to the history and etiology of the disease, its manner of infection, incubation and symptoms, its anatomical appearances, diagnosis and prognosis. It is especially full on the subject of treatment, presenting nearly all the real or alleged alleviatives, which have been suggested.

Dr. Jacobi believes diphtheria to be in most cases a constitutional affection, though he distinctly recognizes its purely local character in some cases. He describes it as very contagious, communicable not only by the patient, but by furniture, towels, dwellings, etc. The infectious substance which produces it he inclines to consider a chemical poison rather than a parasitic one. The presence of bacteria, etc., is rather a concomitant than a cause.

Although, as we have said, the book is quite full in its therapeutics, we cannot say that the treatment recommended by the author differs materially from that current among the more intelligent members of the profession; and as this is confessedly unable to deal with severe epidemics, we fear readers will be a little disappointed if they turn to its pages in search of any decided novelty in this respect.

His advice briefly is that every case should be treated individually, on "general principles." He puts alcohol first, as an adjuvant and a remedy. Locally, the main indication is disinfection. Steam is valuable in catarrhal cases; chloride of iron ranks first among antiseptic and astringent agents. Caustics are not highly spoken of; the membrane must not be removed unless nearly detached. Most or all of the specifics brought forward at various times are worthless.

Wood's Ophthalmic Test Types and Color Blindness Tests. Wm. Wood & Co., New York city.

An oblong pasteboard box, ten inches wide and two feet long, contains a series of worsted skeins used for testing the power of discriminating colors, a copy of Prof. Holmgren's "Confusion plate," to illustrate the mistakes of the color blind, a series of test types, very carefully printed, lenses and lens holder, etc. Snellen's types are those which have been followed.

Doubtless, the tests for color blindness will have especial interest in view of the attention which, in recent years, has been directed to this infirmity. The plan of testing it by colored worsteds has proved convenient and sufficiently accurate, and has already been made familiar to the profession by numerous articles. Messrs. Wood & Co. have done well to add to their test type series these more recent methods of examining for defects in the visual apparatus.

THE

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A GLANCE AT LAST YEAR'S WORK.

In glancing at the original communications which it has been our privilege to lay before the readers of this journal during the last year, no one can fail to notice how fully they represent the many-sidedness of medical labor and thought.

In the present connection we can but advert cursorily to a limited number, rather to indicate the extent of matter presented than to recapitulate the whole number. In fact, we shall refer to much less than half of the whole.

Especially activity may be noticed among the gynecological workers. The several articles on hæmatoma of the vulva and vaginal thrombus, which were contributed early in the year by Drs. MONTGOMERY, STUART and GAILY, attracted the attention of the editors of Schmidt's *Jahrbuch*, and led to a translation of them and comparison of similar facts from other sources. The mechanical treatment of uterine displacements by Dr. LIMBERMAN (March 6) is an example of the intelligent use of modern means. Passing over several well reported cases of ovariotomy and pelvic tumors, we note the numerous articles on different branches of midwifery. The general doctrine of conservatism in obstetrics was well set forth by Dr. GEORGE HAMILTON (June 19); placenta prævia was discussed by Dr. OLIVER (Oct. 9); puerperal convulsions, by Dr. POPE (Feb. 14); the insanity of lactation, by Dr. BEATES (May 15); the method of delivery by version in the presence of contracted conjugates was defended by Dr. STONE (Feb. 7); a new operation or modification for use in lacerated cervix was described by Dr. HERRICK (Jan. 17). A rare and extraordinary case of recovery after rupture of the uterus was reported by Dr. HOYT (Feb. 14); while a very successful plan for treating the sickness of pregnancy was detailed by Dr. FORWOOD (July 10); and an interesting study of the relations of the menopause was contributed by Dr. ARNOLD (June 5).

The subject of anæsthetics was one which received a new impulse at the beginning of the year, owing to the introduction of bromide of ethyl. We have no hesitation in saying that the most complete articles which appeared anywhere on this agent were in this journal, especially those from the pens of Drs. TURNBULL and SOUWERS and the very able summary by Dr. WILSON (Aug. 7). Anæsthetics in labor found an enthusiastic supporter in Dr. BARR (March 13).

In the domain of medicine proper we might direct especial attention to the lectures of Dr. PEPPER on phthisis, on epilepsy and other diseases, which appeared in the spring and summer. They have excited wide attention. A series of articles on the diseases most frequent in the hot months were presented at the appropriate period; such as Dr. BIGELOW'S papers on the summer diarrhœa of adults (May 1); on insolation (June 19); on the hygiene of infants in summer (May 25); and Dr. ATKINSON'S appropriate lectures on the summer diseases of children (July 17). The remarks of Dr. BLACK on hepatico-cardiac sedatives are very characteristic of his peculiar therapeutics (May 15). The subject of transfusion is illustrated by a well-described case, by Dr. BOERMING (April 14), while the indications for this remedial procedure and the details of carrying it out are fully stated in an article by

Dr. STROUT (Sept. 11). A great deal will be found, in both volumes of the year, on the nature and management of diphtheria, and we may mention especially the original communication of Dr. HILL (April 10), and the analysis of seventy-two cases, by Dr. STROUT (Nov. 18). Quite noteworthy is the novel therapeutical measure introduced by Dr. COHEN, by the hyperdistention of the pulmonary alveoli (June 12). The special article on dysentery, by Dr. CONNER (March 6), on continued malarial fever by Dr. GRANT (March 20), and on chyluria, by Dr. ESKRIDGE (April 17), should not be overlooked by those desiring information about these complaints. The important discovery of a new form of disease—catarrhal gland fever—by Dr. HUGO ENGEL (Dec. 13), will unquestionably attract wide attention.

In the domain of therapeutics, strictly so-called, a good deal has been published about the effects of new remedies. The paper of Dr. TRAILL GREEN, on the therapeutic value of the alkaline chlorates, will certainly not have escaped attention (Jan. 17), and Dr. B. REED'S defence of polypharmacy (Jan. 10) is a thoughtful statement of that side of the case.

State medicine has been frequently presented editorially, and a common branch of it, toxicology, is well represented among the communications. The case of injury from the abominable resort of desperate characters, vitriol throwing, reported by Dr. YOUNG, is a striking one (March 13); while Dr. PEPPER'S lecture on lead poisoning contains several new suggestions (May 22).

We have space but to mention the several interesting studies on statistical and general medicine contributed by Dr. SOZINSKEY, on the statistics of scarlet fever (January 24), on why there is a period to life (September 4), etc.

Passing to the province of surgery, we must not omit to name the two excellent essays by Dr. VANCE, the one on the painless cure of internal hemorrhoids (May 8), the other on obscure diseases of the rectum (Aug. 14). On the same branch are Dr. BYED'S able description of the method of the extirpation of the rectum without cutting the sphincter ani muscle (Nov. 11), and Dr. ROBERTS on early excision in cases of rectal cancer (Oct. 23). The description of Heaton's method for the radical cure of hernia, by Dr. WARREN, remains as the most complete which has yet appeared (March 27). Dr. WEIR'S notes on gonorrhœa (April 24), and Dr. BOYLAND'S companion piece on inflammations of the urethral mucous membrane (Sept. 18) will repay reading again. Dr. WIGHT'S articles on fractures (Aug. 14, Sept. 25) are particularly instructive, and the same should be said of that of Dr. ROBERTS, on head injuries (Sept. 4).

The specialties of diseases of the eye and ear have received a full share of attention for a journal which defines its chief aim to be to supply the wants of the general practitioner. The audiphone and dentaphone were described, we believe, in the REPORTER, in advance of any other medical journal; and the articles of Dr. CHARLES TURNBULL early assigned to these instruments their true place. In ophthalmic surgery we merely name the contributions of Dr. KEYSER (July 10); of Dr. SCHELL (July 17); of Dr. LANDESBERG (May 1, Sept. 18); of Dr. OLIVER (Sept. 4); of Dr. HILL (April 3), to show that both the immediate and the sympathetic affections of this important organ have not been neglected.

Here we close our review, not from lack of matter, but because all we set out to do was to indicate how various and how rich is the material in the columns of an active journal. Were the survey extended to the other departments, to the clinics, periscope, notes and correspondence, the results would probably cause surprise at the extent and variety of the information the two volumes contain; yet they show but a part of the medical conquests of the year; so vigorous and progressive is the science we cultivate.

For the year now commencing we have made arrangements to have a still wider scope of contributions. Gentlemen of distinction in several special branches have expressed their willingness to send us the results of their current studies; several active medical societies will be represented which have not hitherto appeared in our columns; translations of a series of clinical lectures from some of the most eminent Parisian professors have been engaged; and in a variety of ways the survey of the field of medical science will be widened.

Notes and Comments

Melanotic Sarcoma—Cerebral Tumor of Same Nature—Aphasia.

M. Ozenne reports this interesting case in *Le Progrès Medical*, No. 41, 1880: A woman of twenty-seven was brought to La Pitié Hospital, in a comatose state. All the internal organs seemed normal; the temperature but slightly elevated; pupils dilated and insensible to the light.

After a few days the coma passed away, but it was found impossible to obtain any reasonable response to questions concerning her condition previous to the attack. A small tumor was found developed in the skin over the first metatarsal bone of the right foot; this tumor was mobile, without connection with the bone, but was the seat of a fungous, blackish ulceration, with indurated borders; proceeding from it up the leg small nodules or roundish masses were found, in the course of the lymphatics, as far as the groin. Several similar nodules were found over the breast. The examination of the eye and the orbit revealed no disease; the internal organs appeared normal; the sphincter muscles alone were paralyzed; micturition and defecation were involuntary; the pulse and temperature were normal, but there was complete aphasia. At the post mortem, the heart was found to contain in its walls a number of small nodules resembling those in the skin of the breast, the endocardium being particularly affected; the other internal, thoracic and abdominal organs were normal. On the surface of the brain a number of similar small nodules were found; the cavity of the left ventricle was dilated by a tumor as large as an egg, soft, black, giving a dark liquid on pressure; in the cerebellum, also, a few nodules. These tumors, on histological examination, presented the characters of melanotic sarcoma.

When, as in this case, the generalization of the disease did not affect the eye or the orbit, the diagnosis of melanotic sarcoma may be affirmed, for the eye is not secondarily affected in this form of sarcoma (Cornil and Trasbot) while in the same form of carcinoma the eye and orbit are apt to be invaded. The brain is not generally attacked, unless there is primitive melanotic sarcoma of the eye or orbit, and this case was exceptional. The situation of the tumor in the ventricle, and the absence of paralysis, convulsions and contracture would seem to confirm the experimental researches of M. Cossy, who affirmed "that effusions into the ventricles, whether serous, or sanguinolent, or purulent, if not in great quantity, and particularly if slowly effused, were not accompanied by convulsive phenomena." The aphasia was explained by the compression exercised by the ventricular tumor on the convolution of Broca (third left frontal).

The Limited Effects of Sanitation.

A serious doubt was cast on the effects of sanitary work, by Dr. John Syer Bristowe, in a recent address as President of the Society of Medical Officers of Health. His words were:—

If we look to the remarkable influence which simple variations of temperature and peculiarities of season exert on the mortuary returns, in respect both of the numbers of deaths and the character of the fatal diseases, and compare therewith the comparatively small effect on the death-rate of even one of the most fatal of the zymotic diseases, or with the insignificant influence of deaths from enteric fever, diphtheria, pyæmia, puerperal fever, and other affections over which sanitary science is supposed to exert a specially valuable influence, we can scarcely avoid, I think, seeing that, on similar grounds, the deaths saved directly by the sanitary labors in which we are engaged must, under any circumstances, be so few annually as to produce no distinct and unmistakable effect on the mortuary rates. I trust, gentlemen, that it will be distinctly understood that I do not deny that valuable (and invaluable) lives are saved by our labors; still less that health is promoted and human happiness by so much increased in virtue of them. I simply venture to urge that these results are not yet—at any rate, to my mind—distinctly manifested in the death-rates; and that it behooves us not at present to boast of results which we cannot prove to have taken place, but to investigate and labor at the death-rates and death-returns in a teachable and hopeful spirit, with the object of discovering in them, if possible, the evidences which, I trust, they contain of the success of our labors in promoting longevity.

The Antiseptic Treatment of Empyema.

This valuable step in advance should be known to all physicians. Not long since, at a meeting of the Manchester, England, Medical Society, Dr. Ashby related three cases, two of the patients being shown at the meeting. The ages of the patients were two and a half, five and seven years, respectively; all three had a history of five to seven weeks' illness. The treatment consisted

in opening the chest under the spray, after the fashion of Hilton's method of opening abscesses, that is, making a free incision through the skin of the ninth intercostal space, just in front of the angle of the rib, and pushing a pair of dressing forceps through the muscles into the pleural cavity, thus avoiding all chance of wounding the diaphragm. Then, about half an inch of the ninth rib was excised by a pair of bone forceps, and a short drainage tube inserted. The dressings were renewed daily for the first week, but by the end of the first month the discharge had become scanty, and dressing every third or fourth day was sufficient. In two of the cases the discharge had ceased and the wound healed by the end of two months; and in the third in two months and a half. One of the children weighed twenty-six pounds on June 27th, when operated upon, and thirty-one pounds ten ounces on August 27th, when the wound had healed. In October, three months after the operation, all three were well; there was no reopening of the wounds.

Vesical Spasms in Young Children.

We learn from the *Journal de Medécine et Chir. Prat.*, that MM. D'Espine and Picot devote an interesting chapter to this affection, in the second edition of their "Manuel des Maladies de l'Enfance." They consider that this form of spasm is of more frequent occurrence than is generally supposed. It is sometimes seen in the new-born child, and is due, in them, to the accumulation in the bladder of urates of ammonia, which are of frequent formation in the kidney at this period of life. But any malady, intestinal catarrhs or lung troubles, or other disease accompanied by high fever and consequent concentration of the urine, may induce this spasm, as also the presence in the bladder of a calculus, etc.

In somewhat older children, not properly protected with drawers, this trouble is apt to recur at intervals. In very young children, the sudden suppression of the urine, accompanied by agitation, should lead to a suspicion of vesical spasm. In older children, frequent desire to urinate will be expressed, but such pain will be induced in attempting to pass water that the child will dread the attempt, and all trouble will cease on the spontaneous or instrumental evacuation of the urine.

In very young children, sweetened emollient drinks may be given, to aid in the elimination of the urates. For older children, warm cataplasms should be placed over the lower part of the abdomen, the child placed in a warm bath and encouraged to urinate therein, an ointment containing belladona applied, and where the spasms recur, flannel drawers should be worn. Bokai recommends, also, suppositories and enemata containing small doses of opium.

Blistering in Anuria.

M. Lombard reports, in *Le Concours Médical*, No. 42, 1880, a case supervening on the abuse of drastic purges and diuretics for three months, in a case of heart disease, accompanied by œdema of the limbs, etc.

At first the urine was voided with much pain and contained blood; then, after two days, complete anuria, with much pain in the glans. Belladonna frictions over lumbar regions, narcotics internally and in enemata, were tried, but without benefit, neither lessening the pain, nor giving any relief, and after three days, when there was less pain, a blister was placed on the lumbar region; the next day a small quantity of urine was voided without pain, and the following day a much larger amount was secreted, and the amount voided continued to increase, and without pain in the passage. The author considered the anuria to have been induced by an attack of acute nephritis, brought on by the use of irritating remedies.

Tabes Dorsalis Cured by Nerve Stretching.

Dr. Langenbeck reports, in the *Berlin. Wochenschrift*, a case of tabes dorsalis, in which nerve-stretching, conducted under antiseptic precautions, resulted in a complete cure. The left sciatic was first operated upon; the motor and sensory paralysis following disappeared in a few days. Twelve days subsequently the right sciatic and both crural nerves were stretched, and with the same results. The feebleness which marked the first efforts at locomotion soon passed off, and the ataxic symptoms disappeared.

Lactic Acid in Vesical Catarrh.

Dr. Deecke, in *L'Union Méd. du Canada*, considers, after extensive experiment, that of the acids lactic acid gives the best results in this affection. He gives from fifteen to twenty grains, ter in die. After forty grains have been taken its presence can be detected in the urine. He asserts that it checks ammoniacal decomposition in the urine, that it dissolves the excess of saline constituents and destroys the microscopic fungi often developed in such urine.

Special Reports.

REPORT ON THERAPEUTICAL AGENTS.

Editorial Introduction.

It is proposed to lay before the readers of this journal, from time to time, reports on the various branches and specialties of medical science, drawn up by writers who devote particular attention to the subject on which they write. These reports will contain, not merely abstracts of recent developments in the field to which they are confined, but also an estimate of the value of discoveries and novelties, by the compilers. It is not sufficient to describe alleged improvements in the art of medicine; sharp criticism of the basis of such claims is imperatively demanded; and it is this which the editor of this journal wishes to introduce into the series of reports of which this is the first. Others of the series will follow, from time to time, as materials present themselves.

It will greatly aid the accuracy and worth of these reports if readers would send us a statement of their *failures* with new instruments and new remedies. Their names will not be published, but the facts will be recorded for the benefit of the profession. There are so many journals published for the purpose of reporting good results only, and so many physicians careful to write only their lucky hits, that this journal announces itself as particularly desirous of hearing the other side, the failures and the pieces of bad luck. We may confidentially mention that we suspect they are not in the large minority. We repeat that neither names nor locality will be stated in the use of these communications, but both are required, so as to authenticate the statements made.

REPORT I.—ON THERAPEUTICAL AGENTS.

Pilocarpin.

This, as is well known, is an alkaloid obtained from the leaves of jaborandi. It has already been referred to in the Reporter as exhibited in *uræmia* and *albuminuria* (July 3d, 1880). Dr. L. Von Hoffer, of Austria, has seen marked improvement in *diabetes* from hypodermic injection of one-third of a grain of the alkaloid.

Prof. Pick, of Prague, has given one-sixth of a grain of the muriate, once or twice a day, an hour after eating, and found it of some benefit in *prurigo*, *pruritus* and *chronic urticaria*; of little or none in *eczema* and *psoriasis*. A singular fact he noticed was its remarkable *effect on the hair*. It hastens recovery in alopecia areata, and acts even more favorably on seborrhœa; indeed, in most cases he says that continued use of pilocarpin exerted an important influence on the oiliness of the hair and on its growth. The skin becomes softer, more pliant and satiny; comedos and papules of lichen pilaris can be more easily pressed out or got rid of, the scurfiness of the scalp becomes less or disappears, the hair is less brittle, the new growth of lanugo hairs changes more rapidly into dense, properly pigmented ones. Under employment of the drug for months the general condition of the patient was not impaired; indeed, the appetite improved, and he was better nourished (*Vierteljahrschift für Dermatologie*, 1. 1880).

The drug also exerts a stimulating influence on the retina. Dr. Mecklenburg (*Berlin. Klin. Woch.*, No. 44, 1080) gives this case:—

A strong and healthy male prisoner, twenty-four years old, who had never previously suffered with his eyes, suddenly became night blind; as soon as dusk set in he could see nothing. It was a case of hemarolopia. The pupils were greatly enlarged, but nothing else abnormal about the eyes.

After the usual means had been tried, Dr. M. injected subcutaneously—

℞.	Pilocarpin muriat.,	0.1
	Aquæ destil.,	5.0

The improvement was immediate, and after the third injection the patient was well.

In Berlin it has also been tried in *syphilis*, when it has reached its constitutional stage, principally by Dr. Lewin, of La Charité Hospital. The following extract from the London *Medical Press and Circular* gives its advantages and disadvantages thus—

In the course of three years and a half he has treated thirty-two patients. Seventy-eight per cent. of the patients were cured. Of seven cases two were of serous form, and had resisted energetic mercurial treatment; the cure was incomplete, and it was necessary to have recourse to injections of corrosive sublimate to complete it. In five other cases the treatment had to be suspended on account of intercurrent complications (endocarditis, hæmoptysis, collapse).

The mean duration of the treatment was eighty-four days. The dose injected each time was usually fifteen milligrams. The cure would be shorter if patients would have daily injections; but as soon as amendment of the symptoms begins they require less and less frequent applications of the remedy.

Pilocarpin seems to prevent relapses with greater surety than mercury or vegetable depuratives. But in respect to facility of application, certainty of result and rapidity of cure, this medication is inferior to injections of corrosive sublimate, and often leaves behind it extreme sensibility to the influences of temperature, which obliges patients, after the cure, to keep their room for some time, for fear of arthritic and rheumatic troubles.

In *diphtheria* it was editorially recommended in the REPORTER (vol. xliii, pp. 524, 540), on the strength of the assertions of Dr. Guttman, of Berlin. His prescriptions were, however, not quoted. They are as follows, he combining pepsin with the alkaloid, in order to combat the gastric catarrh present:—

℞. Pilocarpin muriat., gm. 0.02—0.04
Pepsin, gm. 0.6 —0.8
Acidi hydrochlor., gtt.ij
Aquæ dest., gm. 80.0 M.

SIG.—A teaspoonful hourly, for children.

For adults—

℞. Pilocarpin muriat., gm. 0.03—0.05
Pepsin, gm. 2.0
Acidi hydrochlor., gtt.iij
Aquæ dest., gm.240.0 M.

SIG.—Hourly, a tablespoonful.

Dr. ROTHE, of Altenburg, says (*Med. Cent. Zeitung*, Nov. 6th) that four years ago he tried jaborandi in two cases, but both died, and he renounced the experiment. This throws some doubt on the value of GUTTMAN'S discovery.

The price of pilocarpin is high; it sells in the eastern cities at thirty-five cents per grain, which makes it almost prohibitive in many cases.

Homatropin and its Allies.

The chemists Kraut and Lossen found that atropin may be split up into *tropin* and *tropic acid*, and last year Ladenburg succeeded in reforming atropin from these two constituents. By treating the different salts of tropin with dilute hydrochloric acid, a class of alkaloids may be artificially produced, to which Ladenburg has given the generic name of *tropeïns*; homatropin is one of the alkaloids so obtained. Homatropin retards the heart's action; subcutaneously injected, in man, in doses of $\frac{1}{10}$ to $\frac{1}{5}$ of a grain, it slows the heart by 21 beats per minute, on an average. It antagonizes muscaria. It antagonizes pilocarpin also, arresting the sweating excited by that drug within ten minutes; atropin acts similarly, and more promptly.

The *Practitioner*, October, 1880, says:—

Dr. W. Murrell has used homatropin (hydrobromate), for the night sweats of phthisis, giving it hypodermically in doses of $\frac{1}{10}$ to $\frac{1}{15}$ of a grain; $\frac{1}{5}$ of a grain produced unpleasant effects, such as dizziness, a sickly sensation, and great disturbance of vision; the effective dose was about $\frac{1}{10}$ of a grain. Dr. Murrell has given fifty of these hypodermic injections of homatropin to sixteen patients, and concludes that, although the drug has undoubtedly the power of checking the hypersecretion, the results were not sufficiently satisfactory to justify the belief that it would rank high as a remedy for this distressing symptom. It is decidedly inferior to atropin, Dover's powder, picrotoxine, and other means at our disposal.

The price of homatropin in Philadelphia, at present, is $1.25 *per grain*—so high that it is out of reach as a remedy.

Gaultheria Procumbens.

This wintergreen is chiefly used in this country to impart an agreeable flavor. But Dr. Perier, of Hôpital St. Antoine, uses it as an antiseptic, as follows:—

℞. Essentiæ gaultheriæ, 6 grams
Tinct. quillayæ, 30 grams
Aquæ, 1 litre.

This forms an excellent fluid for injecting into the bladder, for washing wounds, and for some simple dressings. He uses it especially in the treatment of purulent cystitis. It is a powerful antiseptic, of a penetrating but not disagreeable odor and non-irritant. Though its price is high, this does not form a bar to its use, as it is given in very small doses. The essence of winter green is procured from the *gaultheria procumbens*, a North American shrub. Chemically, the essence is called salicylate of methylene, or methylsalicylic ether; it is only slightly soluble in water.

CORRESPONDENCE.

Aspergillus Nigricans.

ED. MED. AND SURG. REPORTER:—

On our return from Europe, and during the voyage on the Atlantic, my wife complained of an uneasiness and a sensation of fullness in her right ear, more especially when exposed to a cool draft of air (such as a hurricane-deck promenade). However, I took no notice of it, as her suffering was of such transitory character. But later, after spending several days in New York, and on leaving for our home in the South (Texas), and ere we had sped half the distance to our native land, over the beautiful hills and fertile valleys of New York, and along the line of the "Erie Road," the severity of the pain increased to that intensity that it remained unmitigated for twenty-four hours, although under the influence of an anodyne. I naturally inferred that it was a case of acute myringitis, reaching suppuration, as after relief came the discharge was the most prominent symptom, attended with impairment in hearing, vertigo, pain in the ears, and *tinnitus aurium*.

On my arrival home, on the 28th of September, 1880, I made a specula examination, which revealed on first inspection, without ablution, a deplorable condition (the membrane being partly obscured by pus); but after syringing the ear out well with tepid saline water, I saw at once that I was dealing with *aspergillus*, which was firmly intact; but repeating the warm saline injections, and now with gentle persuasion by the aid of a delicate pair of forceps, I was enabled to remove it entire, and in a perfect cast of the external

ear, leaving a beautiful expose of the tympanum and external ear, which presented itself as follows: the tympanum being perforated at its anterior and inferior quadrant—the whole surface of the external ear presented a glazed red appearance—and on reëxamination, soon after the removal of the aspergillus, was seen deposited a whitish exudation, or pseudo-membrane, which was reproduced, in twenty-four hours, to its former size. I again removed it, and now taking the precaution to use the instillation a little stronger, which was composed of zinc, carbolic acid, glycerine and alcohol, in the interim using the injection of the "sulphate wash," also occasionally using insufflation of iodoform, which is reduced to "palpable powder" by the action of alcohol. The Eustachian tube opened sluggishly, and was kept open by the aid of a Politzer air bag. I had no difficulty in the repeated removal of this obstinate growth, but to no purpose; just as sure as I removed it, just so certain was it to return.

I will state here, however, that after its second removal its reproduction was slighter, until a mere abortion was observed (a very thin coat of membrane showing the impression of the perforated drum, the thickness of tissue paper). In the meantime I had sent the specimen to Dr. Knapp, of New York, for microscopical examination, and he replies:—

NEW YORK, November 8th.—DEAR DOCTOR, Your specimen is aspergillus in its *finest form*, and has given us great pleasure. You will cure it quickly by using—

℞. Argent. nit., gr.v
Glycerinæ,
Alcoholis, ää ʒj.

by instillation immediately after removing the pseudo-membrane. Yours truly, H. KNAPP.

Another very interesting feature in this case was that I removed two small bodies lying just underneath the skin, and being ulcerated through, situated near the "external meatus auditorius;" these were about the size of duck shot, and resembled in character very much the aspergillus, presenting a darkish appearance, as though sprinkled over by charcoal dust. I believe this affection is almost as rare as cysticercus in the eye. Dr. Moyer reports a case in 1844; Pocine, one in 1851; Schwartze, one in 1865; Roosa, two in 1870; Green, three in 1871; and Robert Wrenden, St. Petersburg, eight, making in all fourteen up to 1872. Since then we have reports from Drs. Knapp, Bush, Burwill, Spencer, and others of our own country. E. W. RUSH, M.D.

Paris, Texas, Nov. 18th, 1880.

A Tough Case.

ED. MED. AND SURG. REPORTER:—

During the summer of 1878, while visiting a patient in the family of Mr. W., I was requested to prescribe for a daughter of W., and receiving a hint that it was some catamenial trouble, I called the mother of the young lady aside and gathered from her the following history:—

Miss M. W., age twenty-two years, American, tall, thin, and quite pallid; antecedents fair. At the usual period of puberty the menstrual nisus began to develop, but no flow followed; the mother became anxious for her daughter's welfare and called in the family physician, who used, as I am informed, almost all known remedies adapted to such pathological conditions as presented at the time, without any apparent benefit. In the meantime Miss W. arrived at the age of seventeen years, when, without any unusual premonitory symptoms there was a *slight show*, which lasted for an hour or two, and then disappeared, to return at irregular intervals up to the above date. Present condition very anæmic; cold extremities; pain in the lumbar region, always increased by lifting; smothering sensations accompanied by palpitation when lying down; the above conditions are always worse for a time after each menstrual nisus, whether or not there is any flow. When there is any *show* the discharge is in small clots, which pass from the uterus unaccompanied by pain or any particular discomfort.

I diagnosed (and an examination verified my opinion) prolapsus uteri as the prime factor in causing the major part of ill feelings. This condition I proposed to effectually relieve, which I did with one of Staufer's invaluable uterine supporters. The scanty menstruation I believed depended upon the impoverished condition of the blood, and I assured the anxious parents as I had relieved the prolapsus so nicely, I could accomplish a cure in the other trouble, and that my measures would consist of: 1st, Sanitation; 2d, Alimentation; 3d, Medication. My directions were followed to a letter, but after two years strenous effort in sanitation, alimentation, and medication—and of the latter I used iron in almost all forms, singly and in combination with nux vom., arsenic, aloes, myrrh, etc., etc., *ad infinitum*—all have failed, and my patient is no better, as far as the menstrual trouble is concerned, than she was two years ago.

But now comes to me a very peculiar phenomena in this case: my patient, with the mother, have but recently informed me of the *fact* that at no time will the menstrual flow come on, or stay on, if the feet and hands happen to get warm; or if a perspiration comes on the flow will immediately cease, and will come on again when the extremities and body go back to their normal condition.

I want light on this, to me, very interesting case. All suggestions in the way of treatment, or otherwise, thankfully received from my medical brethren. W. W. FIERCE, M.D.

Wilksville, Ohio, Nov. 20th, 1880.

Dermic Dressing in Variola.

ED. MED. AND SURG. REPORTER:—

Pulverized talc, or steatite, is a most elegant dressing for moist skin affections of both infants and adults. For ten years it has, in my hands, proved a useful medicament and choice vehicle, topically employed. During the last three months some thirty cases of smallpox have come under the writer's observation, in which steatite has answered a most desirable object. Sweet oil and glycerine, mixed in equal parts, is applied

for two or three days to the heated skin and forming pustules. As soon as the pustules are matured, or turn yellow, the steatite is applied over the face, neck and hands, mixed in water, in the form of paste or whitewash; repeated as often as it falls off or is rubbed off.

It is an energetic absorbent, a deodorizer, overcoming that evil smell peculiar to variola. It controls the "itchy burning" of the surface. It prevents the second formation of crust over the pustules, and thereby renders the pits in the skin less distinct. To the touch it is soft as velvet and as adherent as bronze. For the above named needs it seems to be the Geodine of earths.

A. S. HUDSON, M.D.

Stockton, Cal., Dec. 7th, 1880.

NEWS AND MISCELLANY.

Notes from the University of Pennsylvania.

We are informed by Dr. Pepper, chairman of the Finance Committee of the University Hospital, that Mr. Henry C. Gibson has offered to erect a new wing for incurables, in connection with the University Hospital, at a cost of about $50,000.

The plans are being drawn by Mr. Hewitt, the well known architect, and will be submitted to the examination of a committee of experts in hospital construction, so as to insure the highest degree of perfection in all details. This munificent gift assures the immediate completion of this department, the need of which has been so urgently felt. It will have accommodations for about one hundred beds, and will thus afford an incalculable amount of relief to poor sufferers from chronic diseases, who cannot afford suitable hospital treatment elsewhere.

The proceedings of the charity ball, to be given in behalf of this new department of the University Hospital, will now be devoted to its endowment fund. Further contributions toward the endowment fund are, however, greatly needed, since it will require the interest on an investment of $500,000 to support the entire number of free beds (100) that will be contained in the new building. This extension was needed because the present accommodations of the University Hospital do not admit of the thorough classification of the cases, which will be practicable as soon as the new wing is occupied. It is designed that it shall be ready for patients by October 1st, 1881. It is to be earnestly hoped that the example thus set by Mr. Gibson, of giving during his lifetime a large sum of money to accomplish a definite and greatly needed object, will soon be followed by others. All taxes entailed upon charitable purposes are thus avoided, the exact accomplishment of the donor's wish and intention are secured, and great enterprises are strengthened at most critical moments in the most conclusive manner.

We note with pleasure, in this connection, the recent munificent gift of Mr. Temple to the Academy of Fine Arts, and of Mr. J. W. Williamson to various institutions, and of Mr. John Welsh in founding the professorship in the University, which bears his honored name; but there is still ample opportunity, and most urgent need for similar large gifts, especially to this latter institution, the University of Pennsylvania, to supply the advantages which are imperatively necessary for its proper expansion and full prosperity.

A library building of spacious proportions, to contain the large collection of the University, is greatly needed, but even more important is the need for the endowment of professorships and scholarships, which would encourage science and learning and relieve the financial needs of this great educational institution.

The Increase of the Pellagra in Italy.

Our Consul at Milan reports to the National Board of Health *Bulletin* that, under the direction of the Italian Society of Hygiene, aided by the government, a careful investigation was made, in 1879, into the causes of the steady and alarming increase of *pellagra*, a disease afflicting the laboring classes. The disease attacks the skin, brain and muscles, destroying the powers of the body and transmitting its germs to the offspring. The report of the committee of investigation as to the extent and causes of the disease is now published.

There are over 20,000 cases in Lombardy. In some districts from ten to fifteen per cent. of the population are afflicted.

The effects of the disease are shown in the military levies of the years 1878 and 1879, when in the province of Lombardy twenty per cent. were rejected for physical incapacity, while in the provinces where *pellagra* does not exist there were but ten per cent. rejected.

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ear, leaving a beautiful expose of the tympanum and external ear, which presented itself as follows: the tympanum being perforated at its anterior and inferior quadrant—the whole surface of the external ear presented a glazed red appearance—and on reëxamination, soon after the removal of the aspergillus, was seen deposited a whitish exudation, or pseudo-membrane, which was reproduced, in twenty-four hours, to its former size. I again removed it, and now taking the precaution to use the instillation a little stronger, which was composed of zinc, carbolic acid, glycerine and alcohol, in the interim using the injection of the "sulphate wash," also occasionally using insufflation of iodoform, which is reduced to "palpable powder" by the action of alcohol. The Eustachian tube opened sluggishly, and was kept open by the aid of a Politzer air bag. I had no difficulty in the repeated removal of this obstinate growth, but to no purpose; just as sure as I removed it, just so certain was it to return.

I will state here, however, that after its second removal its reproduction was slighter, until a mere abortion was observed (a very thin coat of membrane showing the impression of the perforated drum, the thickness of tissue paper). In the meantime I had sent the specimen to Dr. Knapp, of New York, for microscopical examination, and he replies:—

New York, November 8th.—Dear Doctor, Your specimen is aspergillus in its *finest form*, and has given us great pleasure. You will cure it quickly by using—

℞.	Argent. nit.,	gr.v
	Glycerinæ,	
	Alcoholis,	āā ʒj.

by instillation immediately after removing the pseudo-membrane. Yours truly, H. Knapp.

Another very interesting feature in this case was that I removed two small bodies lying just underneath the skin, and being ulcerated through, situated near the "external meatus auditorius;" these were about the size of duck shot, and resembled in character very much the aspergillus, presenting a darkish appearance, as though sprinkled over by charcoal dust. I believe this affection is almost as rare as cysticercus in the eye. Dr. Moyer reports a case in 1844; Pocine, one in 1851; Schwartze, one in 1865; Roosa, two in 1870; Green, three in 1871; and Robert Wrenden, St. Petersburg, eight, making in all fourteen up to 1872. Since then we have reports from Drs. Knapp, Bush, Burwill, Spencer, and others of our own country. E. W. Rush, M.D.

Paris, Texas, Nov. 18th, 1880.

A Tough Case.

Ed. Med. and Surg. Reporter:—

During the summer of 1878, while visiting a patient in the family of Mr. W., I was requested to prescribe for a daughter of W., and receiving a hint that it was some catamenial trouble, I called the mother of the young lady aside and gathered from her the following history:—

Miss M. W., age twenty-two years, American, tall, thin, and quite pallid; antecedents fair. At the usual period of puberty the menstrual nisus began to develop, but no flow followed; the mother became anxious for her daughter's welfare and called in the family physician, who used, as I am informed, almost all known remedies adapted to such pathological conditions as presented at the time, without any apparent benefit. In the meantime Miss W. arrived at the age of seventeen years, when, without any unusual premonitory symptoms there was a *slight show*, which lasted for an hour or two, and then disappeared, to return at irregular intervals up to the above date. Present condition very anæmic; cold extremities; pain in the lumbar region, always increased by lifting; smothering sensations accompanied by palpitation when lying down; the above conditions are always worse for a time after each menstrual nisus, whether or not there is any flow. When there is any *show* the discharge is in small clots, which pass from the uterus unaccompanied by pain or any particular discomfort.

I diagnosed (and an examination verified my opinion) prolapsus uteri as the prime factor in causing the major part of ill feelings. This condition I proposed to effectually relieve, which I did with one of Staufer's invaluable uterine supporters. The scanty menstruation I believed depended upon the impoverished condition of the blood, and I assured the anxious parents as I had relieved the prolapsus so nicely, I could accomplish a cure in the other trouble, and that my measures would consist of: 1st, Sanitation; 2d, Alimentation; 3d, Medication. My directions were followed to a letter, but after two years strenous effort in sanitation, alimentation, and medication—and of the latter I used iron in almost all forms, singly and in combination with nux vom., arsenic, aloes, myrrh, etc., etc., *ad infinitum*—all have failed, and my patient is no better, as far as the menstrual trouble is concerned, than she was two years ago.

But now comes to me a very peculiar phenomena in this case: my patient, with the mother, have but recently informed me of the *fact* that at no time will the menstrual flow come on, or stay on, if the feet and hands happen to get warm; or if a perspiration comes on the flow will immediately cease, and will come on again when the extremities and body go back to their normal condition.

I want light on this, to me, very interesting case. All suggestions in the way of treatment, or otherwise, thankfully received from my medical brethren. W. W. Fierce, M.D.

Wilksville, Ohio, Nov. 20th, 1880.

Dermic Dressing in Variola.

Ed. Med. and Surg. Reporter:—

Pulverized talc, or steatite, is a most elegant dressing for moist skin affections of both infants and adults. For ten years it has, in my hands, proved a useful medicament and choice vehicle, topically employed. During the last three months some thirty cases of smallpox have come under the writer's observation, in which steatite has answered a most desirable object. Sweet oil and glycerine, mixed in equal parts, is applied

for two or three days to the heated skin and forming pustules. As soon as the pustules are matured, or turn yellow, the steatite is applied over the face, neck and hands, mixed in water, in the form of paste or whitewash; repeated as often as it falls off or is rubbed off.

It is an energetic absorbent, a deodorizer, overcoming that evil smell peculiar to variola. It controls the "itchy burning" of the surface. It prevents the second formation of crust over the pustules, and thereby renders the pits in the skin less distinct. To the touch it is soft as velvet and as adherent as bronze. For the above named needs it seems to be the Geodine of earths.

A. S. HUDSON, M.D.

Stockton, Cal., Dec. 7th, 1880.

NEWS AND MISCELLANY.

Notes from the University of Pennsylvania.

We are informed by Dr. Pepper, chairman of the Finance Committee of the University Hospital, that Mr. Henry C. Gibson has offered to erect a new wing for incurables, in connection with the University Hospital, at a cost of about $50,000.

The plans are being drawn by Mr. Hewitt, the well known architect, and will be submitted to the examination of a committee of experts in hospital construction, so as to insure the highest degree of perfection in all details. This munificent gift assures the immediate completion of this department, the need of which has been so urgently felt. It will have accommodations for about one hundred beds, and will thus afford an incalculable amount of relief to poor sufferers from chronic diseases, who cannot afford suitable hospital treatment elsewhere.

The proceedings of the charity ball, to be given in behalf of this new department of the University Hospital, will now be devoted to its endowment fund. Further contributions toward the endowment fund are, however, greatly needed, since it will require the interest on an investment of $500,000 to support the entire number of free beds (100) that will be contained in the new building. This extension was needed because the present accommodations of the University Hospital do not admit of the thorough classification of the cases, which will be practicable as soon as the new wing is occupied. It is designed that it shall be ready for patients by October 1st, 1881. It is to be earnestly hoped that the example thus set by Mr. Gibson, of giving during his lifetime a large sum of money to accomplish a definite and greatly needed object, will soon be followed by others. All taxes entailed upon charitable purposes are thus avoided, the exact accomplishment of the donor's wish and intention are secured, and great enterprises are strengthened at most critical moments in the most conclusive manner.

We note with pleasure, in this connection, the recent munificent gift of Mr. Temple to the Academy of Fine Arts, and of Mr. J. W. Williamson to various institutions, and of Mr. John Welsh in founding the professorship in the University, which bears his honored name; but there is still ample opportunity, and most urgent need for similar large gifts, especially to this latter institution, the University of Pennsylvania, to supply the advantages which are imperatively necessary for its proper expansion and full prosperity.

A library building of spacious proportions, to contain the large collection of the University, is greatly needed, but even more important is the need for the endowment of professorships and scholarships, which would encourage science and learning and relieve the financial needs of this great educational institution.

The Increase of the Pellagra in Italy.

Our Consul at Milan reports to the National Board of Health *Bulletin* that, under the direction of the Italian Society of Hygiene, aided by the government, a careful investigation was made, in 1879, into the causes of the steady and alarming increase of *pellagra*, a disease afflicting the laboring classes. The disease attacks the skin, brain and muscles, destroying the powers of the body and transmitting its germs to the offspring. The report of the committee of investigation as to the extent and causes of the disease is now published.

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